The Philosophy of the Commentators,
200-600 AD

400 HUNDRED YEARS OF TRANSITION

The Philosophy of the Commentators, 200-600 AD

A SOURCEBOOK

Volume 3. Logic and Metaphysics

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Many of the translations in this Sourcebook are new. Reprinted translations have been subject to revision, largely to harmonise choice of editions and of certain English terminology. They are mostly taken from the series *The Ancient Commentators on Aristotle*, ed. Richard Sorabji (Duckworth and Cornell University Press, 1987-).

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Jonathan Barnes, 'Ammonius and adverbs', *Oxford Studies in Ancient Philosophy*, supp. vol. 1991, ed. Henry Blumenthal and Howard Robinson, *Aristotle and the Later Tradition*, extract from Ammonius *in An. Pr.*

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Charles Genequand, *Ibn Rushd's Metaphysics*, © 1984 by Brill, Leiden, The Netherlands, extract of Themistius from Averroes.

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D.N. Sedley, 'Alcinous' epistemology', in Keimpe A. Algra, Pieter W. van der Horst, David T. Runia, eds, *Polyhistor: Studies Presented to Jaap Mansfeld*, © Koninklijke Brill NV, Leiden, The Netherlands, 1996, translated extract from Alcinous *Didaskalikos*.

Stephen Menn, *Descartes and Augustine*, © Cambridge University Press 1998, translated extract from Simplicius *in Cael.*

D.N. Sedley, ' "Becoming like God" in the *Timaeus* and Aristotle', in Tomas Calvo, Luc Brisson, eds, *Interpreting the Timaeus-Critias*, Academia Verlag, Sankt Augustin, 1997, extract from Plato *Timaeus*, with the permission of the publisher.

R.W. Sharples, 'Science, philosophy and human life in the ancient world', in M.W.F. Stone, Jonathan Wolff, eds, *The Proper Ambition of Science, London Studies in the History of Philosophy* 2, Routledge, London 2000, 7-27, extract translated from Galen *Quod animi mores.*

Lawrence P. Schrenk, 'Proof and discovery in Aristotle and the later Greek tradition', in his (ed.) *Aristotle in Late Antiquity*, © 1994, The Catholic University of America Press, pp. 103 and 105, extract translated from David [Elias] *in Isag.*, and extract from Philoponus *in An. Post.*

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Preface and Acknowledgements

In 1996, the British Academy advertised a Research Chair in the Humanities and Social Sciences, the vacated half of one of the first two such chairs which had been donated by Lord Wolfson. It was to begin on 1 October 1996, the day after I finished a five-year term at the Institute of Classical Studies, and I was fortunate enough to be awarded it. Without this two-and-a-half year break, I would not have undertaken the Sourcebook.

The work was done in phases.

Phase 1: The initial phase involved preparing the first draft of the Sourcebook in time for a week-long international workshop held at the Institute of Classical Studies in the University of London in June 1997, and financed by the Institute and the University's School of Advanced Study, of which the Institute is a member. Some forty younger scholars attended from all over the world, in order to gain acquaintance with the Philosophy of the Ancient Commentators from the period 200 to 600 AD. The first draft was on the table and was also used by some of the speakers in preparing handouts.

In order to prepare the first draft, I selected topics and illustrative texts, in very much the format of the final version, adding brief introductory headings. Of my research assistants at that time, the work of typing up the available translations was started by Dolores Iorizzo, and then taken over by Sylvia Berryman, with a team of graduate students. It was a mammoth task to deliver the three draft volumes a week before the workshop.

The nineteen speakers at the workshop, in some cases, added their own handouts. They were: Sylvia Berryman, Victor Caston, Gillian Clark, John Ellis, Andrea Falcon, Barrie Fleet, Frans de Haas, Pamela Huby, Jill Kraye, Peter Lautner, Eric Lewis, Arthur Madigan, Mario Mignucci, Sara Rappe, David Sedley, Robert Sharples, Anne Sheppard, Lucas Siorvanes, and Richard Sorabji.

Phase 2: The main recommendation of the workshop participants was that I should add more explanatory narrative. This process led to the addition and subtraction of texts. Furthermore, only the minority of texts selected had been translated in our series, *The Ancient Commentators on Aristotle*, especially as the series was still at a comparatively early stage. So new translations needed to be commissioned, or translated by me when a translator was unavailable.

Phase 3: The resulting second draft was sent out for comment at the end of Summer 1999 to teams of specialists, to whom I am extremely grateful. The *Psychology* volume and the last part of the *Logic and Metaphysics* volume were reviewed by a team of scholars at the Institute of

Philosophy in Leuven: Jan Opsomer (organiser), Gerd van Riel and Guy Guldentops. The *Physics* volume was reviewed by such a team at Utrecht: Frans de Haas (organiser), Keimpe Algra and Peter Wieringa, with a further section undertaken by David Furley. For the *Logic and Metaphysics* volume, the translations concerning Aristotle's *Categories* were reviewed by Gary Matthews and Marc Cohen, the others by Richard McKirahan. The whole volume was reviewed, especially for content, by Jonathan Barnes, with one section undertaken by Angela Longo, and John Dillon gave me his *nihil obstat*.

The main conclusion from this review was that the translations by many hands would need more harmonisation. In the process of harmonising, I also substituted some interpretations of my own, so that the final versions are rather *based on* the work of the translators. I am very grateful to the translators for their work and I apologise for the alterations. Names and initials of translators are recorded in the table at the end of the volume. All translators will have had the opportunity to remain anonymous, if they found the alterations too irksome. Almost no translations remain in their original form, even though the changes have been kept to a minimum. In a few cases previously published translations have been used, or used as a basis, and I thank the publishers and copyright holders listed in the Sources for granting permissions.

I learnt much more from the valuable comments of the expert reviewers, and it was only at this stage of pulling the selections more tightly together, that I began to feel I had a picture of the philosophy as a coherent whole. I hope that the reader may share some of this experience, finding their own interconnections and contrasts when they read the texts side by side.

The complex revisions of the volumes were typed up and set in order by two research assistants with a remarkable ability to keep a grasp of details. David Robertson took responsibility for the *Physics* and *Psychology* volumes, Eleni Vambouli for the *Logic and Metaphysics* volume. Ian Crystal finished off some of the work on *Psychology* and Jennifer Strickland inserted final corrections with electronic supervision by Han Baltussen.

Phase 4: The third draft was sent to the publisher for further review in October 2000, and the draft also benefited from classes based on the Sourcebook at the University of London in 1999-2000, and at The University of Texas at Austin in March to May 2001 and 2002.

Phase 5: In a fifth phase of checking for accuracy, I have been enormously helped by the watchful eye of Devin Henry, and also by readings on the part of my colleague at King's, Peter Adamson, and by Cosmin Andron, Jan Opsomer, Guy Medigon, David Furley and Andrea Falcon and, at proof-reading stage, John Sellars.

I should like to thank my colleagues in the University of London for the ease with which they accepted the proposal in the late 1970s that the nine hundred years after Aristotle should be included in the undergraduate syllabus. The only question I was asked was whether the Neoplatonists

after Plotinus would provide enough material. The Sourcebook is part of the answer.

The Sourcebook would not have been possible without the funding of the translations in the series *Ancient Commentators on Aristotle*, of which there are now over fifty volumes. For this I wish to thank the following: the National Endowment for the Humanities, Division of Research Programs, an independent federal agency of the USA, the Leverhulme Trust, the British Academy, the Jowett Copyright Trustees, the Royal Society (UK), Centro Internazionale A. Beltrame di Storia dello Spazio e del Tempo (Padua), Mario Mignucci, Liverpool University, the Leventis Foundation, the Arts and Humanities Research Board of the British Academy, the Esmée Fairbairn Charitable Trust, the Henri Brown Trust, Mr and Mrs Egon, and the Netherlands Organisation for Scientific Research (NWO/GW). A special grant towards the Sourcebook was provided by the Gresham Trust, to which I am very grateful.

It is hoped that the Sourcebook and the volumes of translation will complement each other. The published translations will provide extra annotation on content and text for some (not all) of the passages in the Sourcebook, while the Sourcebook will explain ideas touched on, sometimes briefly, in the published translations. Translations in the series are listed at the end of the volume.

Introduction

The Philosophy of the Commentators of 200-600 AD constitutes the transition from Ancient to Medieval Philosophy. The period started with the Aristotelian (Peripatetic) School battling against Stoics and Platonists. But soon Neoplatonism became dominant, swallowing up the other schools, while still displaying their influence, especially that of the Aristotelian, Alexander of Aphrodisias. He, like most of the others, did much of his own Philosophy through the medium of commentary on earlier Philosophy, and that is why the Greek philosophers of this period can be called commentators. Alexander's commentaries, and most but not all of the surviving ones, are on Aristotle.

Meanwhile, the balance of power shifted from Paganism to Christianity. The two sides stood in a love-hate relationship, which can sometimes be glimpsed in the commentaries. The theology and spirituality of Neoplatonism profoundly influenced Christian Philosophy. And so did the inward turn to find truth within oneself, started by the Stoics and developed by the Neoplatonists.

Neoplatonist Philosophy, which somehow used and harmonised the warring Greek schools of the past, proved very congenial to the Philosophy of at least two religious cultures, first that of medieval Islam from the ninth century to the end of the twelfth, and then that of medieval Latin-speaking Christianity from the late twelfth century onwards. If we skip from Plato and Aristotle to Descartes two thousand years later, or to Thomas Aquinas 1600 years later, we shall not understand the later thinkers, because they were influenced by what came in between. Thomas was avidly reading the commentators who had been and were being translated into Latin and was seeing Aristotle through their lenses.

The commentators were not only a source of influence for posterity. Their commentaries also provide a panorama of up to a thousand years of earlier Greek Philosophy, and they embed fragments of that Philosophy otherwise lost. Some of the commentaries represent classroom lectures and provide the historian with fresh light on teaching methods. They also contain Philosophy of very considerable interest in its own right. The Sourcebook will present the commentators' own philosophical ideas rather than presenting them just as commentators. They include much to stimulate modern philosophy students, arguments about determinism, or the beginning of the universe, for example. The ancient commentaries on Aristotle's *Categories* force the reader to think Aristotle's philosophy through to a level unmatched by modern discussion.

Now that there are over fifty volumes of English translation available

in the series *The Ancient Commentators on Aristotle*, it is becoming easier to identify previously unidentified writings as fragments of lost commentary, or as translations, especially into Arabic, of lost bits of commentary. Thanks to valuable discoveries by others, the available corpus is beginning to grow a little.

To return to the influence of the commentators, they are essential for understanding Medieval Latin Philosophy, since the Neoplatonist Commentators turned Aristotle's God into a Creator and endowed his human soul with immortality. Their motive was to defend the harmony of Plato and Aristotle against Christian charges of inconsistency. By an irony, this harmonisation finished up by making Aristotle safe for Christianity in the thirteenth century, when William of Moerbeke was showing his Latin translations of the commentators to Thomas Aquinas.

The commentators are also the source of major ideas previously thought to have been invented in the thirteenth- or fourteenth-century Latin West: the idea of impetus theory, hailed by Thomas Kuhn as a fourteenth-century scientific revolution, and the idea of intentionality which, in the nineteenth century, Brentano claimed to take from Thomas Aquinas' medieval followers and which he made a centrepiece of modern Philosophy of Mind. Galileo's early works mention the commentator Philoponus more often than they mention Plato. There will be fresh examples in this Sourcebook of medieval ideas deriving from the ancient commentators, for example the idea of latitude of forms in the *Physics* volume. Thus the commentators represent a missing link in the history of Western Philosophy.

The need for this sourcebook

The ancient Greek commentaries on Aristotle, edited by H. Diels for the Prussian Academy a hundred years ago, amount to some 15,000 pages. The present Sourcebook, as will be explained shortly, will go beyond the commentaries to other works by the commentators. So the relevant corpus is vast. In Diels' Germany such was the standard of Greek learning that H. Usener could review the massive series halfway through and K. Praechter when it was nearly complete.[1] But in the First World War, many of the next generation of potential Greek readers shot each other dead. Even with the fifty or more volumes now translated into English, it takes an expert to know which will be the volumes particularly relevant to his or her interests. Hence the need for a Sourcebook, to make the commentators accessible to the much wider readership which could find them interesting.

The selection

The commentators also wrote non-commentary works, and the Sourcebook draws equally on these since the two kinds of work throw light on each other. In addition, besides the Greek commentaries edited by Diels, there are commentaries lost in the original Greek, but surviving in other lan-

guages, especially often Arabic, Hebrew, or Latin. Where the surviving version has passed through one or more than one language, the task of retroversion to work out the original Greek is especially difficult. Translations of some of these texts will be included in our selections.

The commentators wrote commentaries on Plato, but the surviving corpus is incomparably smaller and had already been partly translated.[2] But there are plans for a new English translation of the important commentary by Proclus on Plato's *Timaeus* by Harold Tarrant, Dirk Baltzly and David Runia, and for a new French edition and translation of the same by Jan Opsomer. There will also be translations of other commentaries on Plato, including, it is hoped, Proclus *in Crat.*, in the series *Ancient Commentators on Aristotle*, and a good number of the commentaries on Plato are represented in the Sourcebook.

The Neoplatonist commentators often find the start of a problem in Plato. But because Plato wrote dialogues, he tends to put into the mouths of his characters many different suggestions, without seeking any unifying solution across his works. The Neoplatonists, however, thought Plato was conveying a solution, and so not surprisingly they were able to disagree on what the solution was. Aristotle was the very opposite of Plato. He strives for consistency across his works. Moreover, unlike Plato, he is not content to raise problems and explore them, but endeavours to find definitive solutions. It is for different reasons, then, that the commentators disagree on what Aristotle thought, not least because of the preposterous, but fruitful, Neoplatonist idea, to which I shall return, that Plato and Aristotle were in basic agreement.

A further major influence on all the commentators was Stoicism. Alexander and the Neoplatonists alike had to oppose or incorporate Stoic ideas.

The Sourcebook is not intended to be an introduction to Neoplatonism, both because Aristotelians (also known as Peripatetics) and Christians are to be covered as well, and because under the Neoplatonists the commentaries on Aristotle formed the introductory part of the student philosophy syllabus. Matters of higher theology were not so likely to be treated here as in the commentaries on Plato, especially on his *Timaeus* and *Parmenides*, which formed a later part of the syllabus, or in non-commentary treatises. Although these texts will also be quoted, the emphasis will be more on philosophy than on theology.

In selecting what will interest readers, one has to be guided by current biases. A hundred years ago, when Idealist philosophies were very popular in English-speaking countries, much more of Neoplatonism would have seemed obviously relevant. The central doctrines of Neoplatonism will appear here, but divided up among different philosophical topics. Someone seeking to introduce Neoplatonism might put in the forefront Plotinus 4.8 [6] 1, his personal experience of how soul relates to Intellect, 4.8 [6] 8, his personal hypothesis on our undescended soul, 5.3 [49] 1; 10-13 on why we need to believe there is a One as well as Soul and Intellect, and 5.1 [10] 10, summarising these three realities. All those ideas will appear. But just as

the ancient enterprise of commenting on Aristotle imposed an Aristotelian order on what the Neoplatonists said, so analogously with this modern Sourcebook. The topics and sub-topics chosen represent partly ancient and partly modern interests. The central ideas of Neoplatonism will appear, but I shall approach them from the direction, currently more familiar, of Aristotle's interests.

The organisation will be by topics and sub-topics, with concepts explained only so far as necessary for a first understanding. The topics are grouped into three volumes, corresponding to Psychology (with Ethics and Religious Practice), Physics, and Logic and Metaphysics.

One surprise in preparing the Sourcebook has been finding how often it seemed necessary to quote someone who is not nowadays thought of as a commentator at all, Plotinus. The commentators mention Plotinus chiefly for those few issues on which they disagree with him, but otherwise tend to leave him in silence. Yet often, it turns out, Plotinus is the only extant source which explains the background ideas that the Neoplatonist commentators were discussing. This might not be so true if more had survived of the commentaries of his pupil and editor, Porphyry. It may seem very much to distort Plotinus to chop his discussion into little bits for a Sourcebook. For he is a philosopher who excels in wrestling at length with a problem, seeing new objections, and new analogies to answer them. How can he be represented by snippets? Yet Plotinus describes himself as merely a commentator on Plato's words, when he explains the three fundamental levels of reality, 5.1 [10] 8 (12). And it has been remarked that later commentators treat Plotinus as just one among other commentators on Aristotle, e.g. 'Philoponus' *in DA* 535,8-12; Simplicius *in Cat.* 2,3-5; Simplicius *in Phys.* 706,25-8; 769,6ff.; 791,27ff.[3] So if treating him as a commentator is a distortion, it is an old distortion, and one he sometimes invited.

A bigger surprise awaited me when I read the selected texts assembled for the first time side by side. The selection was made out of interest in the individual topics. But read side by side, the texts revealed themes and concepts running through disparate texts. Not only these agreements, but also disagreements became more obvious. There are disagreements within a school and agreements between schools. Again, as regards the Neoplatonists a hierarchy among the chosen subjects became apparent, with Psychology at the summit, as we shall see, influencing the treatment of Physics, Logic and Metaphysics. It became necessary to begin harmonising the translations by different hands, to bring out the common themes and concepts. And it became possible to start rewriting the narrative, to show the interrelations and contrasts within the bigger picture. These processes could last a lifetime. But it seemed more useful to invite readers to join in the process themselves. I believe that readers will find their own interconnexions and contrasts when they read the texts side by side.

I hope the assembly of materials will facilitate much better interpretations of the texts. Certainly, the interpretations provided or implied by the

selections here should not be regarded as final, even if there were such a thing as a final interpretation. And this brings me to what the Sourcebook cannot do.

What the Sourcebook can and cannot do

I have already said that the Sourcebook is not a general introduction to Neoplatonism. It also faces the opposite problem from that tackled in the admirable Sourcebook for an earlier period, A.A. Long and D.N. Sedley, *The Hellenistic Philosophers*. Instead of there being too little material surviving, there is too much. Thus it cannot treat in depth every topic raised, nor cover every topic. It is meant to offer not the last word, but a first assembling of texts, to make them accessible, so that others can make new discoveries, offer new interpretations and fill gaps.

Another thing which the Sourcebook does not aim to do is to establish a canon of texts. That would be most undesirable. It is an introduction, a way of first getting into the commentators' philosophy.

There is a very wide range of people who have not specialised on the commentators, but to whom they are relevant. One example would be the philosophy professor who wants to see what would be interesting for his or her class. The book is intended also to help specialists in other related fields: Islamicists, Latinists, theologians, historians of science, scholars of other types of commentary or of commentary in other languages, and Medieval or Renaissance scholars, to name but a few.

Although the commentators will be treated as of interest in their own right, scholars whose interest is rather in the texts of Plato and Aristotle commented on will find that there is a very great deal to be learnt from the commentators' discussions. It will frequently be important to check what the commentators have to say. This is even more true of the more fragmentary authors preserved by the commentators, since the context of preservation can shed precious light on the meaning of the fragments.

A bibliography up to 1990 is supplied in the collection of essays, Richard Sorabji, ed., *Aristotle Transformed: The Ancient Commentators and Their Influence*, London & Ithaca, NY. That work proceeds commentator by commentator, rather than by topics, and offers historical and methodological background rather than illustrating philosophical content. It should be treated as complementary and its content will not all be repeated here. More recent bibliography is planned for 2004.[4]

The commentators

Although Aristotle's immediate pupils discussed and developed his work, it was three hundred years later in the first century BC that commentaries on Aristotle got going. Of the early commentaries we have only fragments. They focused on Aristotle's *Categories*, which was also an object of attack. Sooner or later, it was asked why Aristotle named precisely ten categories,

when Plato was content with a twofold distinction between relatives and what exists in its own right. Could not categories other than substance all be treated as relatives, e.g. quantities like large, qualities like good at boxing, acting, being acted on, posture, when, where, and having on or wearing? That might depend on whether we take Aristotle's second definition of relatives in *Cat.* 7, which is narrower than the Platonic one. It might also depend on whether Aristotle's classification is of things, words, or concepts, for grammatical distinctions are very numerous.

The earliest commentaries on Aristotle still extant are by members of the Aristotelian (or Peripatetic) school in the second century AD. Those of Aspasius and, from the end of the century, Alexander of Aphrodisias are quoted in the Sourcebook, but from Aspasius we have only a commentary, not very comprehensive, on Aristotle's *Nicomachean Ethics*. Alexander, by contrast, the Aristotelian chair-holder in Athens, provides the most systematic development of Aristotelianism, written around 200 AD so as to bring the system up to date in relation to contemporary opponents. Substantial portions of the two lost commentaries by Alexander, on Aristotle's *Physics* and *On Generation and Corruption*, have recently been discovered, one in Greek and one in medieval Arabic, and translations will appear in the series *Ancient Commentators on Aristotle*. A newly found inscription by Alexander honouring his father confirms that he held the official chair as Aristotelian successor in Athens.[5]

To the Stoics, Alexander sometimes responded with outright opposition, e.g. over the right form of logical syllogism, but sometimes by implying that Aristotle already knew what the Stoics were saying. For example, the anti-Platonic distinction of mere appearance from actual belief is presented by Aristotle in terms of belief's involving conviction based on reasons. But Alexander instead borrows the Stoic account of belief based on the idea that reason *assents* to appearance.

Alexander attacks the Platonist belief in the reality of universal Forms, and his downgrading of universals, which goes well beyond Aristotle, proved surprisingly influential with Neoplatonists at one level, even while they defended the reality of Forms at another. Another opponent of Alexander, who leaned in the direction of Platonism, was the eclectic philosopher-doctor Galen with whom Alexander disagreed on dynamics and on time.

Occasionally, Alexander defends Aristotelianism by criticising Aristotle's argument as fallacious, if necessary.[6]

Alexander, and the treatise *Mantissa*, much of which may be by Alexander, had a considerable influence on the founder of Neoplatonism, Plotinus. It fitted Plotinus' views that Alexander interpreted the active intellect which Aristotle located in humans as being God resident within us. The *Mantissa* distinguishes the way in which the ordinary human intellect and the simple divine intellect are self-aware. Plotinus echoes Alexander's account of human self-intellection, but reserves total simplicity for a divinity higher than the divine Intellect, namely the One.

Plotinus discussed Alexander in his seminars in Rome in the mid-third century AD, but he also knew Aristotle's critics and made use of them. He complained that Aristotle's categories did not cover the all-important Platonic Forms, 6.1 [42]. A better classification of reality was Plato's distinction in the *Sophist* of five Great Kinds, 6.2 [43]. Even for the sensible world, only four of Aristotle's categories were useful, and that in modified form, 6.3 [44].

But in a decisive move (I follow here the standard interpretation), Plotinus' pupil, editor and biographer, Porphyry, restored Aristotle to the syllabus of Western literature once and for all. Aristotle's *Categories*, he said, was not about things, but about words insofar as they signify things, and words get applied primarily to the sensible world, not to the world of Platonic Forms.

Porphyry wrote commentaries on many of Aristotle's works and an Introduction (*Isagoge*) to Aristotle. Neoplatonist commentaries, from here on, with a few exceptions, increasingly represent the lecture courses given to students.

Porphyry also wrote probing inquiries into the religions of Christianity, of his fellow-Platonists, and of the Egyptians. I shall come to his *Against the Christians* later. In *On Abstinence from Killing Animals*, he criticised his fellow-Platonists for sacrificing and eating animals. He studies in turn the nature of animals, of the gods and of humans, to show that these practices cannot be justified on any ground. I regard this as one of the most interesting philosophical works of late antiquity, and it is translated in the series *Ancient Commentators on Aristotle*. In his *Letter to Anebo*, now fragmentary, Porphyry respectfully questions the practices of Egyptian religion.

Iamblichus was a reforming prophet. He seems to have attended Porphyry's lectures, though he proved a disrespectful pupil, and certainly not a disciple. On the harmony of Plato and Aristotle, if on little else, Porphyry and Iamblichus were allied. But they quarrelled on religion, even though Porphyry's probing of religious practice and belief was extended against the Christian religion as well as against the Egyptian religion which Iamblichus revered. Iamblichus' most important religious work, *On the Mysteries of the Egyptians*, is a defence of pagan ritual and sacrifice in reply to Porphyry's *Letter to Anebo*. It is written in a magisterial tone as coming from the Father of God, an Egyptian religious designation. Porphyry is addressed as 'you', and castigated as not even a good Platonist. Iamblichus thinks that Porphyry was looking for explanations of religious practice at too naturalistic a level beneath the divine.

Iamblichus set up his school at Apamea in modern Syria, in a beautiful site adorned later in the fourth century with mosaics by the Emperor Julian during his brief attempt to revive paganism. The mosaics, as I believe (*Aristotle Transformed*, ch. 1), represent the Rhetoric as well as the Philosophy faculty in the university where Iamblichus had earlier taught. Iamblichus died probably just before Constantine made the Empire Chris-

tian, founding Constantinople in 324, and summoning the Council of Nicaea in 325, which *inter alia* reaffirmed Christian opposition to animal sacrifice. Against this, the Emperor Julian's attempt at revival in 361-2 did not succeed.

As regards the harmonisation of Aristotle with Plato, Iamblichus went further than Porphyry, since he regarded Aristotle's categories as fitting not only the sensible world, but also the intelligible world of Platonic Forms. This required a higher interpretation, which he called 'intellective', of Aristotle's *Categories*, in parallel with the higher interpretation of religious practice. Iamblichus' pupil, Dexippus, however, reflects the Porphyrian, more than the Iamblichan, interpretation of Aristotle's categories. Iamblichus also took harmonisation further through a thoroughgoing attempt to integrate Pythagoreanism with the philosophies of Plato and Aristotle. Iamblichus further established the standard curriculum of twelve dialogues of Plato, to be read by students after the selected treatises of Aristotle, in a sequence designed for religious purposes, to lead to union with God.

In the fourth century, Themistius was a very different sort of commentator. He was an orator, politician and essayist in the capital city of Constantinople, and devoted only some of his time to Philosophy. He wrote shorter paraphrase commentaries, which, however, still offer distinctive interpretations, for example of Aristotle's definition of change, where he saw that it mattered which of several potentialities Aristotle meant to refer to. He has similarly distinctive ideas on concept formation, space, time and the continuum, and his attacks on Galen on space and time provoked replies in later commentators. His acquaintance with Neoplatonism shows through, and we sometimes see him siding with the Platonists against the Aristotelians, e.g. when he argues that Platonic Forms are needed to explain biological reproduction, *in Metaph. 12*, quoted by Averroes, translated in **Physics 1(b)** (16). Despite being different from other commentators, Themistius proved extremely important. We see him responding to Plotinus and allowing individual human intellects, *in DA* 103,32-104,6, at **Logic and Metaphysics 17(e)** (5). The importance of this is that Thomas Aquinas in the thirteenth century supported himself in his controversy against followers of Averroes by citing Themistius as allowing for the immortality of individual human intellects. It is further to Themistius' credit that he was aware that pseudo-Archytas' *Categories*, much trumpeted earlier in the century by Iamblichus as Aristotle's source, was not written before Aristotle by the Pythagorean Archytas (so Boethius *in Cat.*, *PL* 64, 162 A-B).

In the early fifth century, Plutarch of Athens, who died in 432 AD (not the earlier Plutarch of Chaeroneia), provided a house in Athens for the Neoplatonist school, which archaeologists believe they have found. He and his pupil Syrianus, who was probably more critical of Aristotle than the other commentators, both taught the young Proclus. It is recorded that the works of Aristotle were known as the Lesser Mysteries, being introductory

to the Greater Mysteries of Plato. In Proclus' commentaries there is already visible the division into portions long enough for a one-hour delivery, and into separate discussions first of the doctrine and then of the wording of each Aristotelian passage. Proclus was encouraged by Plutarch to base a commentary on Plutarch's lectures on Plato's *Phaedo*, and he based his commentary on Plato's *Timaeus* on the lectures of his teacher, Syrianus. This commentary has for the Sourcebook proved the most important of the non-Aristotle commentaries.

Proclus presented himself as a holy man, capable of miracles, and purified himself with sea bathing even in winter in old age. He often opposed Plotinus. He rejected Plotinus' idea that part of our soul has never ceased from its uninterrupted contemplation of the Platonic Forms. And he rejected Plotinus' attempt to downgrade the reality of evil by equating it with an amalgam of Aristotelian matter and privation. Evil is something more active for Proclus, which parasitically feeds on the good.

In the fifth century, the future of Neoplatonist teaching began to be cemented by pupils taking over the headship in Athens or Alexandria, and even by marriage. Hermeias, who headed the school in Alexandria, married a relative of his teacher Syrianus, a relative originally intended for Proclus, while Hermeias' successor was his son Ammonius, who first studied with Proclus.

In the late fifth and early sixth centuries in Alexandria, Ammonius taught the most brilliant of the remaining Neoplatonists of both the Alexandrian and the Athenian schools, with the exception of the disaffected Damascius who started in Alexandria as a rhetorician, turned to Isidore, not to Ammonius, for philosophy, and fled with Isidore from Alexandria after the violent persecution in 488-9 of Neoplatonists by Christians. Ammonius did, however, teach Philoponus, Asclepius, Simplicius, and probably Olympiodorus. The first two wrote a number of commentaries 'from the voice of' Ammonius, in other words, based on the lectures of Ammonius, as were Proclus' in at least one case on those of Syrianus.

Although we shall see that Praechter was wrong to suggest that the Alexandrian Neoplatonists diverged from the Athenian by adopting Christianised monotheism, nonetheless Ammonius did introduce some changes of direction. I shall come later to his lack of interest in the magic of names. What is relevant here is his attitude to Aristotle. Syrianus in Athens, while expressing great esteem for Aristotle, had thought it necessary to oppose him head on concerning certain subjects (*in Metaph.* 80,4-81,14). He and his pupil Proclus saw that Aristotle disagreed with Plato both on the existence of Platonic Forms and on God's role as Creator. They both argued that Aristotle ought, on his own principles, to have agreed with Plato (Syrianus *in Metaph.* 117,25-118,11; *ap.* Asclepium *in Metaph.* 433,16; 450,22; Proclus *in Tim.* 1, 266,28-268,24).

Ammonius turns this around. He held that Aristotle actually did accept Plato's Forms, at least in the guise of principles (*logoi*) in the divine

Intellect (Asclepius, *in Metaph.* 69,17-21, from the voice of Ammonius; cf. Zacharias, *Ammonius*, *PG* vol. 85, col. 952 Colonna). And he wrote a whole book designed to show that Aristotle actually drew the conclusion that God was the efficient cause of the world's existence, using some of the same arguments Proclus said he should have used. Certain relevant passages are translated in **Physics 8(c)** and **(d)**.

It would be wrong to deny that the works of both Plato and Aristotle were taught in both the Athenian and Alexandrian schools. And indeed Ammonius will have used Proclus' lost commentary on Aristotle's *On Interpretation*. But the extant commentaries of Syrianus, and of his pupils Proclus and Hermeias, and those of Damascius in Athens are on Plato, while those by, or from the voice of, Ammonius in Alexandria are on Aristotle.

Philoponus was a Christian and philosophically the most brilliant of all the commentators. He increasingly used Neoplatonist doctrine, in which he was steeped, to make the case for Christianity against the pagan Neoplatonists. In 529 AD he published what I would regard as another of the most interesting philosophical works of Late Antiquity. His *Against Proclus On the Eternity of the World* proves that pagan principles support the Christian belief in the beginning of the universe. This text is also being included in the series *Ancient Commentators on Aristotle*. Philoponus introduces the argument, sometimes wrongly credited to St Bonaventure in the thirteenth century, that even the pagans must admit that Christianity is right that the universe had a beginning, because they cannot afford to allow that past years, and a fortiori past days, reach and will exceed infinity. His Christian ideas are reflected also in his commentaries on Aristotle, and the writings add up to a Christian alternative to Aristotelian science (Richard Sorabji, ed., *Philoponus and the Rejection of Aristotelian Science*). As regards the Aristotelian idea of prime matter as the ultimate subject of qualities, Philoponus substitutes the idea of featureless extension which serves as a field for the qualities. This three-dimensional extension acts not only as the basic matter of bodies, but also as the form by which body is defined.

Philoponus also made major contributions to dynamics. He can be regarded as the inventor of the force called impetus, which Thomas Kuhn treated as a scientific revolution of the fourteenth century. He is praised by Galileo for his very effective arguments for the possibility of motion in a vacuum, which would not, as Aristotle alleged, call for infinite speed. And he reports experiments with the speed of fall of bodies of different weights.

AD 529 was a fateful year. St Benedict founded the monastery at Monte Cassino and the Christian Emperor Justinian closed the Athenian Neoplatonist school. Damascius, its then head, displayed an originality concerning time as discontinuous, prime matter, the causal mechanism of procession (**Physics** volume), pleasures of the mind as activities and thinking as distinct from its objects (**Psychology** volume), often by way of correcting Proclus. His escape from Christian persecution in Alexandria

and subsequent career has been vividly described by Polymnia Athanassiadi, who thinks the house used by Damascius for the school, distinct from Plutarch's, can be identified among the excavations.[7]

The fate of the seven Athenian philosophers, including Simplicius and Priscian, after their brief removal to the court of Chosroes at Ctesiphon in modern Iraq, is a subject of much discussion. The attractive idea that the Athenian School did not disappear from the map of history depends, unfortunately, on circumstantial evidence none of which is conclusive. According to this view,[8] Simplicius at least (some say the others too) went to Harran, a site in modern Turkey, from where in the ninth century a mathematician-philosopher came to Baghdad and was appointed (on this view because of his Harranian learning) to facilitate the Arabic revival of the Neoplatonist commentary tradition. Be that as it may, Simplicius wrote the most informative commentaries of all, after 529 AD, commentaries which have the leisure to give the most comprehensive survey available of the course of Greek philosophy, and which include bitter comments on the irreligion of the faithless Christian renegade, Philoponus. Simplicius' commentary on Aristotle's *Categories* incorporates the most thorough critique known to me of the basic metaphysics that Aristotle propounds in that work. His commentary on Aristotle's *Physics* contains two excursuses on place and time, whose interest matches that of the excursuses on place and vacuum in the *Physics* commentary of Philoponus.

Thanks to Ammonius, the Alexandrian school continued, but Olympiodorus, in the mid-sixth century, was the last pagan head. Elias and David were Christians, whose extant commentaries are shrunk down to the logic part of the syllabus, which is perhaps all the Christian students were expected to learn. If Stephanus, who probably continued into the seventh century, is the author of the Greek commentary on Book 3 of Aristotle's *On the Soul* attributed to Philoponus (and the recent translation of this work may help to support this conjecture), then there will have been a modest, but temporary, re-expansion of interest.

The revival of the commentary tradition was due above all to the Arabic world of ninth-century Baghdad, where al-Kindi master-minded translations of Greek texts, often via Syriac. A further revival came in the twelfth century, when Arabic texts from Spain as well as Greek texts from the Byzantine world were translated into Latin. The continuing translations were to be used, among others, by Thomas Aquinas in the thirteenth century, with important results for the tradition. The extent to which the commentary tradition was advanced before that in the Byzantine world between the seventh and the twelfth centuries is only now beginning seriously to be explored. The only two late Byzantine commentators quoted in the Sourcebook are Eustratius in 1050/1060 – *c.* 1120 AD and Michael of Ephesus, who in 1138 AD or later, was made by the Princess Anna Comnena to assemble and supplement the commentaries on Aristotle preserved from a much earlier date. Michael's collections of pseudo-Alexander commentary have been most fully studied by Sten Ebbesen. Michael's own

commentaries on Aristotle's *Nicomachean Ethics* and on the biological works, which had been omitted from the earlier curriculum, tend to be in the style of Alexander rather than of the Neoplatonists.

Obviously, translation played a major role in this transmission, but as Carlos Steel has made clear, the environment has to be receptive as well, if translation is to have this kind of influence.[9]

Neoplatonism

I have already said that the Sourcebook focuses on the Commentators, not on Neoplatonism. But most of the commentators are Neoplatonists, and Neoplatonism is much less widely studied nowadays than Aristotelianism. So to many the commentators' Neoplatonism will seem unfamiliar. Can it be made more familiar?

Charles Taylor in *Sources of the Self*, Cambridge 1989, ch. 7, has described a radically reflexive stance which is very familiar to modern philosophers because it is the stance of Descartes. It attends to our own experience and sees this as the source of truth. The only thing is that Taylor, followed by others (e.g. Phillip Cary, *Augustine's Invention of the Inner Self*, Oxford 2000), ascribes to Augustine the shift to this radically reflexive stance, whereas, with one exception, everything that Taylor uncovers in Augustine was already in Plotinus, who in turn draws at least his *terminology* for self-awareness from the Stoics, and in fact more than terminology, since Epictetus *Discourses* 3.22.38-9 says that we find preconceptions about the good within ourselves, and Cicero borrows from the Stoics when he says in connexion with natural law and justice, *On Laws* 1.22.58, that one finds them within (*in se*), cf. also *Republic* 3.22.33.

Augustine tells us that he learnt his methodology of looking inwards from 'the books of the Platonists', *Confessions* 7.10.16. Plotinus and Porphyry were his main sources for this. Augustine may in addition be influenced by Cicero, when he offers a view of natural law as written in our hearts and impressed on us, though for this he draws also on Romans 2.14-15, at *Confessions* 2.4, and *On Free Choice of the Will* 1.6.15.

The exception is that Augustine is the first person we know to have produced the *cogito* arguments, later made famous by Descartes, although even here Augustine may have been partly inspired by Porphyry when he *applies* the *cogito* to arguing that we can know that our soul is incorporeal. One example, from almost a dozen, of Augustine's use of the *cogito* is given under **Psychology 4(f)** and **6(b)**.

Augustine's use of Plotinus in no way impugns his originality. Putting old material to new use is a form of originality, which Augustine also displays elsewhere. But what it does mean is that it is Plotinus and the Neoplatonists, and in a preliminary way the Stoics before them, who really introduce into Western Philosophy Taylor's radically reflexive view so familiar from Descartes. We see how important Plotinus thought it that the objects of Intellect should be *within* the Intellect from the debate that

Porphyry reports in his *Life of Plotinus*, chs 18, 20 (**Psychology 3(k)**). In Plotinus' seminar, Porphyry was made to debate the question and only converted to Plotinus' view after two replies by his fellow student Amelius.

Admittedly, Proclus later disagreed with Plotinus' view (*in Parm.* 948,14-20) because he took it to be allied with Plotinus' belief that part of our soul never ceases its unconscious contemplation of the intelligible Forms. But Proclus *in Alc. 1* 5,13-14, following Iamblichus *ap.* Proclum *in Alc. 1* 11,11-17, and like the *Anonymous Prolegomena to Platonic Philosophy* ch. 26, holds that the starting point for Plato and the whole of Philosophy must be the Delphic saying 'know thyself', studied in Plato's *First Alcibiades* (translations in **Psychology 15(a)**). This fits with Plotinus' insistence, which influenced Augustine, that we must look for the chief levels of reality, the Intellect and the One, *within* ourselves, 1.6 [1] 9 (8); 5.8 [31] 10 (31-43); 6.9 [9] 7 (16-23), translated in **Psychology 15(b)**. Plotinus' most famous autobiographical account of his experience of union with the Intellect in 4.8 [6] 1 (1-11) starts by saying that he has often withdrawn from everything else into himself. Even the phenomenological character of the experience is taken to indicate how things really are. There is not merely a sense of timelessness; the Intellect, and one's self as united with it, are really timeless, 3.7 [45] 11. There is not merely a loss of sense of where one's own boundary stops and that of Intellect or the One begins, 6.5 [23] 7 (14-17); there is genuine union. Plotinus holds more generally that the source from which something stems is within it, and he applies this to the hypostasis Intellect: 'For in turning back (*epistrephein*) on itself, [Intellect] turns back on its source' (Plotinus 6.9 [9] 2 (35-6); tr. BF).

Cary (op. cit., ch. 3) has argued for Augustine's invention of the Inner Self, and has distinguished Augustine from Plotinus as inviting us to look not only in ourselves for God, but first in and then up. But not only does Plotinus also recognise more than one level. (The characteristic ratiocinative self is below the intellect of soul, which is a higher self; there are many levels of self; the human Intellect is in turn derived from the divine hypostasis Intellect; the One is beyond Intellect again; see **Logic and Metaphysics 18(a)**). But more importantly, Plotinus puts more into the inner world than Augustine, since he locates everything divine within. Only the sensible world, as described in the **Physics** volume, and in the earlier part of **Logic and Metaphysics**, remains outside.

There is another contribution of Neoplatonism, which is a contribution of the whole period 200-600 AD. It addresses some questions which we ought to address, but do not, or not sufficiently. For example, the Christian world traditionally believes in life after death, and accordingly some aspects of this question are much discussed by modern philosophers: would disembodied consciousness be possible? What would make the supposedly revived future person to be me, rather than someone else? But other relevant questions have been relatively neglected, and at these points, where late antiquity may seem to us to be at its most outlandish, we should instead see the need to address the questions. If, as the Christian tradition

holds, we shall have new bodies in the next life, what kind of bodies would be appropriate to such different conditions? Here the easily ridiculed discussion of Platonic physical vehicles is relevant. Would such a life be even tolerable for humans, let alone superior? Here the ascetic practices of late antiquity, pushing human possibilities to their limits, which may seem so alien, are highly relevant. If the life in question is instead disembodied, might it be a life outside of time altogether? The idea that space and time might in any case be the less real products of a more profound reality has indeed been endorsed by the modern physicist David Bohm (*Wholeness and the Implicate Order*, London 1980), and in a joint seminar with myself and Clive Kilmister at King's College London, he considered the Neoplatonists to be expressing exactly his own view.

The transformation of Plato and Aristotle

In Neoplatonism, though not in Aristotelianism, Plato and Aristotle are transformed in a variety of different ways. The transformation is partly driven by a wish to harmonise Plato and Aristotle, but only partly. There is less effort to harmonise the two in some commentators than in others, and on some issues, we shall see, there is less harmonisation among our commentators than there was in the Middle Platonism of an earlier period. Further, the transformation of views is driven by other factors too besides harmonisation.

Harmonisation is most marked in Porphyry and Ammonius. It seems to be least favoured by Syrianus and Proclus. Simplicius says that the good commentator should find Plato and Aristotle in harmony on most points, *in Cat.* 7,23-32. The presumption for a Neoplatonist is that, in case of disharmony, it is Plato who will be right. But even this is reversed by a late commentator, Olympiodorus, who backs Aristotle against Plato on the definition of relatives, *in Cat.* 112,19ff.

As an example of harmonisation, we have seen that Porphyry, on the standard interpretation, harmonised Aristotle's categories with Platonism. Hereafter, it became increasingly useful to reinforce the myth of harmony in the face of Christian charges that pagan philosophers contradicted each other. As already mentioned, there was an irony in this, because the harmonisation, whose motive was thus partly anti-Christian, finished in the thirteenth century by helping Thomas Aquinas to present Aristotle as safe for Christianity, since the assimilation to Plato had turned Aristotle's God from a thinker into a Creator, and Aristotle's human soul into an immortal one.

One might have thought that the pressure towards harmonisation would be bad for Philosophy. Having to convince the Christians that Plato and Aristotle agreed with each other on almost everything would surely lead to loss of their wonderful insights. But in fact it gave a distinctive character, interesting in its own right, to Neoplatonism. And, curiously, it led to an even closer reading of the texts of Plato and Aristotle, because

their texts had to be read very closely indeed, if one was going to argue that what they really meant was something different from what at first sight might appear. Another example of pressure being fruitful, instead of destructive, was offered by Edward Grant (*Viator* 10, 1979). In 1277, just after the death of Thomas Aquinas, Bishop Tempier of Paris condemned 219 philosophical and theological propositions. One might no longer say that it was beyond God's power to move the entire physical universe sideways. What on earth would this mean? Were the philosophers being forced into talking nonsense by the imposition of clerical correctness? Not at all, says Grant. The need to avoid the condemned propositions proved a valuable stimulus to the imagination about how to think of space and time. Whether or not this is true of the 1277 condemnation, I think that something of this kind happened earlier with the Greek Neoplatonist commentators. They took Plato to postulate a changeless and timeless world of divine Platonic Forms and they had to think out how such a world would relate to the temporal, changing world described by Aristotle.

I should like now to look at some examples of what happened to the views of Plato and Aristotle in Neoplatonism, to see what factors besides harmonisation are at work, whether Plato is transformed in the process as much as Aristotle, and where the transformations were important for subsequent Philosophy.

It is difficult to harmonise Plato with Aristotle on certain issues concerning rationalism versus empiricism. In the *Theaetetus* 186A-187A, Plato maintains that perception can do practically nothing at all without the aid of reason, and the Middle Platonist, Alcinous, elaborates this view in his *Didaskalikos* ch. 4, to maintain that there would be no perceptual recognition without reason. So far this rejects Aristotle's view that perception is entirely separate from reason and that animals can get along very well by using perception on its own, while completely bereft of reason. But a qualification is that the relevant kind of reason, for Alcinous, is empirically based and manifested in opinions (*doxastikos logos*).

To take another example, Plato holds in the *Phaedo* that our concepts are recollected from a life before our birth and stored in our rational souls. Aristotle, by contrast, argues in the last chapter of his *Posterior Analytics* that the most rudimentary universal concept of (say) an ox is based on nothing more than many memories of perceived oxen, and that perception already grasps universal concepts, though intellect plays a role at some stage. How can these very different views of the competence of perception as opposed to reason be harmonised?

The Platonists go several different ways on this issue. Some, starting with the Middle Platonist, Alcinous (*Didaskalikos*, ch. 4), accept both Aristotle's concepts and Plato's, while often regarding the latter as more accurate. Others, starting with Syrianus and Proclus and continuing with Simplicius and Olympiodorus, though listing Aristotle's concepts, attack them, especially in geometry, as unable to do the necessary work. A third manoeuvre is the claim of Iamblichus, Philoponus and perhaps Plutarch of

Athens, that Aristotle himself accepted Plato's pre-nate concepts alongside his own empirically gained ones. This is explained in **Psychology 5(b), (c)** and **(d)** and **Logic and Metaphysics 5(c)** and **12(b).**

As for perception, Priscian repeats that empirically based reason, *doxastikos logos*, is required for perceptual recognition. But the late Neoplatonists give a further role to *logos*, now in the sense of a concept. Perceptual recognition cannot occur unless the recollected Platonic concepts are projected from the mind, to make the recognition possible. So far, the harmonisation concerning the first issue, concepts, has been mixed. Despite some harmonisation, and positive support from Philoponus, a tendency among some Neoplatonists has been rejection of Aristotle's account of concepts. On the second issue, perception's independence from reason, rejection of Aristotle has been complete – perceptual recognition cannot occur without reason. But the concept of reason has been modified. In some cases, an empiricist concept of reason has been substituted. In other cases, Plato's insistence on the need for reason has been defended by means of a theory of projecting concepts which goes far beyond Plato.

There is a third issue, also connected with the dependence of perception on reason. How are we aware of our own mental activities? Discussing awareness of our own perceptions, Aristotle says that this is effected by a perceptual faculty, the so-called 'common sense'. But Proclus objects that, besides perception, we also have, and are aware of, reason and different kinds of desire. Surely awareness of all these diverse activities must be assigned to something higher than the common sense. 'Simplicius' *in DA* comes to Aristotle's aid. The common sense can indeed be aware of this great diversity of activities, he says, if we once recognise that human common sense is permeated by reason. This answer is perfectly congenial to the Platonist tradition, which, starting from Plato's *Theaetetus*, regards perception as dependent on reason. But to Aristotle this defence of his reference to the common sense would be anathema. As the great biological taxonomist, he wanted to show that perception was independent of reason and could be used to mark off the animal kingdom. Aristotle loses again in this harmonisation.

But Aristotle does not always lose. Something very unexpected happened in the commentators' discussion of universals. Plato introduced the idea of Forms or Ideas, and these were understood by Aristotle and by other schools in the following centuries to be universals which somehow transcended the physical world and yet explained the acquisition of properties by things in the physical world. This Platonic account of universals was condemned in turn by Aristotle, by the Stoics and by Aristotle's great protagonist, Alexander. Aristotle complained that the changeless Platonic Forms could not act as causes of anything, and he along with Alexander substituted deflationary accounts of universals, Alexander in some texts reducing them to mental constructs with a role of practically no significance at all. Would we not expect the Neoplatonist commentators to turn against Alexander's deflationary account? It is very surprising, then, to find that the Neoplatonist Porphyry, and Boethius expounding Porphyry,

seem content with a deflationary account of universals close to the one proposed by Alexander. What has happened to universals as Platonic Forms? The answer, I believe, is that the Neoplatonists have so emphasised the role of Forms as causes, a role which Aristotle said they could not play, that they are willing to backtrack on the other role of Forms as universals, Simplicius *in Cat.* 82,35-83,20, Proclus *in Parm.* 880,3-11. A Form is not after all something universal and common to all instances, for it is too far superior to them. If it is something common at all, it is common as a cause to all its effects, but not as a common feature. Thus Aristotle loses on the issue of whether Forms can be causes, but he wins on the issue of whether universals are Forms.

The Aristotelians suffer from a curious distortion of their account of individuals. When Porphyry writes his introduction to Aristotle, the *Isagoge,* he describes individuals as being unique bundles (*athroismata*) of distinctive qualities (*idiotêtes*). Why? – for Aristotle believes that the individual consists of matter and form. I conjecture that once again Plato's *Theaetetus* is the ultimate source, although the *athroisma* idea is in the same chapter of Alcinous, *Didaskalikos*, ch. 4. In the *Theaetetus*, the individual Theaetetus is described as consisting of qualities such as a distinctive snubness of nose. The terms 'bundle' (*athroisma*) and 'distinctive' (*idios*) occur earlier in the *Theaetetus* respectively at 157B-C and 154A, 166C. I think Porphyry offers this Platonic view of the individual, because his introduction is for beginners in Philosophy, and he does not yet want to broach the more complex concepts of matter and form, which enter into Aristotle's account of the individual. But because Porphyry wrote this in an introduction to Aristotle, later Neoplatonists, Proclus, Simplicius, and possibly 'Philoponus', though they are well aware of Aristotle's belief in matter and form, take it to be a view, if not of Aristotle, at any rate of the Aristotelian school. If so, the Aristotelians' account of individuals has been harmonised with Plato's, this time by a sort of accident of interpretation.

My first three examples have come from the field of psychology: concepts, perception and self-awareness, my next two from logic and metaphysics: universals and individuals. The next two examples will come from physics. Aristotle disagreed with Plato in postulating a fifth element as constituting the heavens, whereas Plato had been satisfied with one of the standard four elements, namely fire. The commentators offer almost opposite harmonisations, according to whether they are friendly or hostile to Aristotle. Proclus, the hostile one, tries to show, in the preface to his commentary on Plato's *Timaeus*, that Plato had already anticipated virtually everything that Aristotle had to say. So when Plato associated the shape of the heavens with the fifth of the five figures that had been shown to be the only possible regular convex solids in geometry, he was anticipating Aristotle's fifth element, *in Tim.* 1.6,29-7,2; 2.49,29-50,2. The explanation is repeated by Simplicius, *in Cael.* 12,16-27. But Simplicius knows a more friendly method of harmonisation, *in Cael.* 85,31-86,7.

Aristotle recognised that the heavens were a particularly pure mixture of the four elements with fire predominating. He spoke as if the result were a fifth element, only to emphasise its divinity in praiseworthy opposition to the sort of view more recently taken by the Christians. On both interpretations Aristotle's view is accommodated, but on the first he comes out an imitator, on the second a hero. Harmonisation is not a unitary procedure.

The same hostility is exhibited by Proclus, this time on better grounds, in connexion with God's responsibility for the world's existence. Aristotle's God is a thinker, not a creator, and he inspires motion in the universe, but does not provide existence, since the five elements exist independently of him. At best, as pointed out by Iamblichus' pupil Dexippus, the motion (by producing seasonal rainfall, etc.) gives form and life to some things. But Proclus complains that, on his own principles, Aristotle should have made God responsible for the existence of the universe. Proclus' pupil, Ammonius, effects the harmonisation, arguing at book length that this is what Aristotle intended his principles to show,[10] and Simplicius follows Ammonius. This is the tradition that enabled Thomas Aquinas to harmonise Aristotle's God with Christianity.

I should finish with the other harmonisation that was crucial for Christian acceptance of Aristotle – the issue of individual immortality. This time, even Plato's views caused some problem. Although he makes Socrates assure his friends in the *Phaedo* on the day of his execution that he personally will survive, there is room for worry that the rational soul, which is what Plato regards as the true self, is rather impersonal. On one interpretation, Plato's *First Alcibiades* even recognises this at 130D. The worry comes to a head when Plotinus discusses those disembodied human souls which have attained the ideal state of identifying themselves with Intellect, and whose thoughts have the same content – the Platonic Forms. What is there left to distinguish these souls from each other? Plotinus' analogy is with a theorem in a mathematical system. Each theorem is distinct, but cannot be understood as a theorem, except in terms of the whole system.

But if this preserves some individuality, why should Aristotle agree? He insists from the opening chapter of *On the Soul* that no mental activities, with the possible exception of thinking, can occur apart from a body The soul turns out to exist only as enforming a living body, so that, presumably, we perish when we die. The special case of thinking is discussed in Book 3, ch. 5. Here room is made for a productive intellect to be resident in us. But is this intellect part of us, or, as Alexander was to say, is it rather God resident in us, which offers no immortality to us? Themistius disagreed with Alexander, and made it part of the human soul. But even that leaves a question: is it a soul shared by the human race, as the followers of Averroes were later to say, or is it individual? In his controversy with the Averroists, Thomas Aquinas claimed support from Themistius, who allowed for individual intellects. What Averroes did was to apply to all of our intellect what Philoponus and 'Philoponus' conceded about part of our

intellect, that its immortality is merely an unending succession of mortal intellects (**Psychology 3(g)** and **Logic and Metaphysics 17(e)**). In this example, Plato as well as Aristotle have to be subjected to careful reinterpretation, to get the desired result.

Let us draw some conclusions. Plato has been reinterpreted as well as Aristotle on perception, on concepts, on the fifth element, on individuals and, most radically, on universals. Only some attempted to harmonise Plato and Aristotle on concepts, and any harmonisation on individuals was an unrecognised accident. The forces in play have not only been harmonisation. There was also a misinterpretation arising from the reinterpretation of Porphyry's *Isagoge* as an authoritative source for Aristotelian views. And there was a response within Platonism to internal pressures concerning the role of Forms. The more important the causal role, the less defended was the role of Forms as universals. The effect of these changes on Medieval Philosophy was almost as important in the case of universals as in the case of the Creator God and the immortal human soul.

The commentators and Christianity

The Neoplatonists lived in a love-hate relationship with Christianity. Often they influenced it, for example, on the natures of Christ and the person of the Trinity. They shared many concerns: life and punishment after death, containers for the departed soul, continuity and individuality of the person, body-soul relations, prayer, prophecy, providence, evil, fate, chance, temptation, sin, pride and the Fall, forgiveness, freedom from emotion, demons and angels, sacrifice, suicide and martyrdom, nature and the supernatural, mystical experience of God, his ineffability, the creation of the universe, its beginning and end, the stars, time and eternity, timeless knowledge and causation, omniscience and omnipotence. They moved in the same world of ideas and the Sourcebook will make cross-references.

In his *Confessions* 7.9.14; 7.20.26, Augustine describes being converted to Christianity in 386 AD by 'books of the Platonists', which clearly include some works of Plotinus. Courcelle has claimed to trace to the day the Platonist ideas Augustine would have heard from the sermons of St Ambrose in Milan. Even later, in *City of God* Book 10, Augustine concedes that Porphyry has a dim awareness of the Christian Trinity, when he speaks of three gods, describing One and Intellect as God the Father and God the Son, and further recognising not merely Plotinus' third hypostasis, the Soul, but a triad of Being, Life and Intellect (*City of God* 10.23; 29, translated in **Logic and Metaphysics 14(c)**). Porphyry, Augustine says, also recognises the limitations of pagan theurgic ritual, regarding it as unnecessary and unhelpful to intellectuals like himself and even recognising the importance of God's grace, though Augustine complains that Porphyry exploits the utility of theurgy in recruiting the masses to pagan religion, *City of God* 10.9; 27; 29, translated in **Psychology 18(b)**. Grace,

we shall find there, had also been recognised earlier by Plotinus, and was even more recognised in theurgy itself by Iamblichus and Proclus.

Porphyry is a striking case. His serious probing of Christianity in *Against the Christians*, parallel to his probing of Egyptian religion in his *Letter to Anebo*, was viewed as the most serious intellectual threat to Christianity and was twice subjected to burning. Yet his advocacy of the Chaldaean ideals of faith, truth, love and hope (*Letter to Marcella* 24, translated below), and his insistence that the true sacrifice is that of a pure mind (*Abstinence* 2.61, translated in **Psychology 18(a)**) fit very well with Christianity, even if not for the Christian reason that animal sacrifice is superseded by Christ's having made the final sacrifice. Moreover, Porphyry's non-spatial account of the relation between soul and body seems to have been applied by Augustine and other Christians not only to soul and body, but also to the natures of Christ and the persons of the Trinity.

We have seen that Porphyry's probable pupil, Iamblichus, made a powerful defence of pagan religious practice in the early fourth century. He replied with some contempt in *On the Mysteries of the Egyptians* to Porphyry's doubts, and provided a model to the later Emperor Julian for the revival of pagan religion.

In the fifth century, pagan Neoplatonists were severely persecuted by Christians in Alexandria, while in Athens Proclus stopped teaching for a year, to avoid persecution for impiety. We have seen that Damascius escaped from Alexandria, eventually to become head of the Neoplatonist school in Athens. Proclus and Damascius both complain, sometimes in coded terms, of the hegemony of Christianity, which they regard as deeply irreligious, and which they still hope is temporary. The complaints made against the Christian Philoponus by Simplicius after the Athenian closure of 529 have already been mentioned. He calls Philoponus 'the Grammarian' perhaps in allusion to his having a post other than the Philosophy Chair, but he also thinks of a grammarian as one who knows a text without putting it into practice (*Commentary on Epictetus*, ch. 62, lines 22-7 Hadot (with her comment p. 55) = Dübner 134,17-24). Philoponus, however, was attacked from both sides. He eventually became the intellectual leader of those Christians who believed that Christ had only one nature, not two natures, one human, one divine. But this doctrine was declared heretical, and Philoponus was also posthumously condemned for applying to the Christian Trinity Porphyry's conception of three gods, instead of three persons.

Other Christians at the end of the fifth and beginning of the sixth centuries also harnessed Neoplatonist views. Boethius' classic *Consolation of Philosophy* is so congenial to Platonist belief that Boethius has wrongly been thought not to be Christian. Pseudo-Dionysius, as much as Augustine before him, drew on Neoplatonism in ways that profoundly influenced Christian mystical thought. But his method was the very different one of plagiarising the theological ideas of Proclus to produce Christian documents purporting to come from St Paul's disciple Dionysius in the first

century. The plagiarism worked, and there is a note, possibly written by Philoponus, claiming that it was Proclus who plagiarised Dionysius.

In Alexandria, by the time of Olympiodorus, pupils were predominantly Christian, and we see him telling them that they can think of Neoplatonist daemons as angels (*in Alc. 1* 21,15-18), and that he is as much a monotheist as they are (*in Gorg.* 32-3; 243-4, the latter passage translated in **Logic and Metaphysics 14(c)**). In fact, five *in Cat.* commentaries say that the purpose of reading Aristotle's philosophy is to know that there is only one supreme source, Ammonius 6,9-16; Philoponus 5,34-6,2; Olympiodorus 9,14-30; Simplicius 6,6-18; Elias 119,26-121,4. Elias, the Christian professor, argues against objections that this was Aristotle's view.

The pagan Neoplatonists, though postulating many gods, were not thereby violating the views of such Christians as Origen *Against Celsus* 5.4 and Augustine, who allowed the term 'god' to be applied to both angels and, in Augustine's case, humans. He explicitly agrees with Porphyry, in *City of God* 9.23, that this is only a verbal issue, provided, he adds, that the other gods owe their divine characteristics to the one God, as the Neoplatonists would agree. Olympiodorus issues an analogous *caveat*, that the other gods are used by the One Cause as intermediaries. Some Christians, Origen and Eusebius, were even ready to apply the term 'god' to persons of the Christian Trinity, and the Christian commentator Philoponus was to endorse that, even though his endorsement was condemned. Texts are translated in **Logic and Metaphysics 14(c)**.

I think it will throw light on the religious situation to consider what concession Ammonius had to make to the Christian authorities in order to keep the Alexandrian School of Neoplatonism open, and how much this concession affected the teaching.

There has been a mystery what agreement Ammonius struck with the Christian patriarch. Damascius in Athens expresses his disgust in his so-called *Life of Isidore* 250,2; 251,12-14, now put in its wider context as fr. 118B in Damascius' *Philosophical History* by Polymnia Athanassiadi:

> Ammonius, who was disgustingly mercenary and saw everything in terms of profit of any kind, made an agreement with the then bishop of the prevailing doctrine, Damascius *Philosophical History* 118B Athanassiadi (= *Life of Isidore* 251,12-14; tr. RRKS).

Three suggestions have run into counter-examples,[11] Praechter's of 1910 and 1912, that Ammonius agreed to continue a policy, alleged to be Alexandrian, of reducing the number of Neoplatonist gods to one by collapsing the One into the Intellect, Saffrey's of 1954 that he agreed to teach only Aristotle, not Plato and Westerink's of 1962 that he kept quiet about the pagan belief in the eternity and divinity of the world (references in Sorabji, ed. *Aristotle Transformed*, 12). I therefore suggested (loc. cit.) that the agreement was more likely to concern not theological doctrine directly, but

refraining from the open promotion of pagan practice, which (as Athanassiadi has now shown, though her sympathies lie with Damascius and against Ammonius, 30-2 of her *Damascius. The Philosophical History*) Damascius carried out in Athens, bravely, but incautiously.

Athanassiadi has added yet a further hypothesis, with which I have explained my disagreement elsewhere, that Ammonius' concession was to betray the hiding places of his fellow Neoplatonists in Alexandria during the persecution of the 480s, and that his reward was not literally financial.[12]

My own conjecture, that Ammonius' concession concerned first and foremost pagan religious practice, fits well with new evidence that Ammonius expresses a very different view of religion from that of his Athenian predecessors. What strikes me most is Ammonius' treatment of the efficacy in ritual of divine names properly chosen by a theurgist, and the evidence that this provides for the naturalness of certain names. Ammonius claims at the beginning of his commentary on Aristotle's *de Interpretatione* 1,6-11, that he is recording the interpretations of his teacher Proclus, although he hopes to add further clarification himself. It has been shown by Anne Sheppard how closely Ammonius' commentary follows Proclus' commentary on a different work, Plato' s *Cratylus*.[13] Yet when Ammonius comes to the present subject, he is silent about the argument from the efficacy of divine names in ritual, to which Proclus had devoted pages. This efficacy is not only endorsed by the *Chaldaean Oracles*, but used as a proof of the naturalness of divine names by Iamblichus *Myst.* 7.4, 255,5-256,3 Des Places, and by Proclus *in Crat.* 51-2; 57; 71 Pasquali, whose view is mentioned as one among others by Damascius *in Phileb.* 24 Westerink. According to Proclus, Iamblichus held that Theurgy imitates secret marks implanted in us by the gods, when it frames divine names, *in Crat.* 71, 31,24-32,5 Pasquali. Yet Ammonius is silent about all this. Instead he refers to the efficacy of *human* names in certain prayers and curses. And even to this he devotes only three lines, *in Int.* 38,23-6. Moreover, because the efficacy of human names was not the argument that appealed to the Neoplatonists, he is able to dissociate Neoplatonism entirely from the whole line of thought, and credit it instead to a philosophically irrelevant Egyptian priest, Dousareios of Petra. The Christian Origen, borrowing presumably from a Platonist source, had argued that the natural efficacy of *divine* names in ritual is even clearer evidence of their naturalness than the natural efficacy of *human* names, *Against Celsus* 5.45.[14] Iamblichus discounted the use of human names, at least in the case of love-spells, as depending merely on *human* artifice exploiting natural sympathy in the universe.

Why was Ammonius silent at this point on his predecessors' major argument for the naturalness of certain names? Robbert van den Berg has pointed out[15] that while Proclus offers a role in the giving of names (and not only of divine names) to the divine Craftsman (*in Crat.* 51, pp.19,22-20,21 Pasquali; *Plat. Theol.* 1.29, p. 124,12-20 Saffrey-Westerink),

Ammonius denies (*in Int.* 38,26-8; *in Cat.* 11,8-17) any role to the gods in the giving of names. Names are, as Aristotle says, the result of human agreements. In this, Ammonius follows Porphyry's view that names are 'imposed' by humans. But Aristotle is said still to agree with the Socrates of Plato's *Cratylus* that names are natural in one of the senses mentioned by Proclus *in Crat.* 7,18-8,14, for they are like artistic images which fit the natures of things, *in Int.* 34,17-37,18. Ammonius, unlike Proclus, supports Aristotle and harmonises him with Plato partly through taking a different view of the gods, a view in this case based on Porphyry. This different account of the gods need not be, as I once thought, the result of his agreement with the Christian authorities, but rather something which helped to facilitate that agreement.

There is another piece of evidence about Ammonius' treatment of religion. At the beginning of his commentary on Aristotle's *de Interpretatione*, 1,6-11, he has a punning one-line invocation of Hermes, god of eloquence and hermeneutics. Iamblichus had also invoked Hermes as god of eloquence at the beginning of his *On the Mysteries of the Egyptians*, but he does so in a religious spirit, to open a religious treatise, calling Hermes protector of the true science of the gods, accepted by all priests (1.4-2.3 Des Places). Even more devout are the prayers which the Athenian Simplicius includes in his commentaries. The prayer at the end of his *de Caelo* commentary, 731,25-9, has been studied for its fervour by Philippe Hoffmann,[16] who translates it as follows.

> These reflections O Lord, Creator of the whole universe and of the simple bodies within it, I offer to you as a hymn, to you and to the beings you have produced, I who have ardently desired to contemplate the greatness of your works and to reveal it to those who are worthy of it, so that, conceiving nothing mean or human about you, we may adore you in accordance with your transcendency in relation to all the things you have created.

By contrast Ammonius merely says that if he is able to add further clarification after recording the interpretations of Proclus, he will owe thanks to the god of eloquence. David Blank has pointed out, in his translation in the *Ancient Commentators* series, that there is probably a pun in acknowledging the god of hermeneutics in a commentary on Aristotle's treatise, whose Greek title, *Peri hermêneias,* also invokes hermeneutics.

If I am right that Ammonius' concession concerned religious practice, what did he gain in return? I conjecture that it was a salary to keep his prodigious teaching going. We know that his philosopher-father, Hermeias, had received maintenance from the state (*dêmosia sitêsis*), and that through the influence of his mother, this had exceptionally been extended to the young Ammonius and to his short-lived brother, until such time as they should become philosophers (Damascius *The Philosophical History* fr.

56 Athanassiadi). In other words, the Christian authorities, at least in an earlier generation in Alexandria, had actually invested in his becoming a philosopher. Whether or not he was a member of the disliked School of Horapollo, they may well have thought that Ammonius was not, like Horapollo, going to start converting Christians. At least by the time of the disbandment of Horapollo's school, if not sooner, Ammonius will have needed money to continue teaching, and given the city's acceptance of his mother and investment in his playing that role, it may have seemed only natural to provide a teaching salary, on condition that the teaching did not emphasise pagan religious practice, as in Ammonius' case they might have been confident it would not.

Even if I am right that Ammonius' concession was, contrary to Praechter's view, primarily about religious practice, Praechter will still have been right to the extent that there were bound to be some implications for doctrinal content, but these implications will have been derivative. One implication would have been the need to avoid the argument from the efficacy of theurgically chosen divine names. But in addition, Ammonius' Alexandrians did not write theological treatises as Iamblichus and the Athenians did, such as the commentaries on the *Chaldaean Oracles*, Iamblichus' *On the Mysteries of the Egyptians*, Proclus' *Platonic Theology*, or Damascius' *On First Principles*. Praechter was wrong that they suppressed the One. Nor did they deliberately simplify Proclus' system of multiple gods and henads. But it is just as significant that they did not write the sort of treatises which would have told us what they thought about these gods and henads. Praechter was moreover right that they focused more on Aristotle and gave Aristotle more credit than Proclus had. Praechter pointed out that the Alexandrian, Olympiodorus, backs Aristotle against Plato on the definition of the category of relatives, *in Cat.* 112,19ff. I would also recall that whereas Proclus complains that Aristotle wrongly failed to make God responsible for the existence of the universe (*in Tim.* 1.266,28-268,24 Diehl), Ammonius wrote a whole book to show that this was precisely what Aristotle did do (so Simplicius *in Phys.* 1361,11-1363,12).

Although I do not believe that Ammonius was involved in betraying the hiding places of his fellow Neoplatonists in the 480s, was his concession a betrayal of the spirit of Neoplatonism? No: only of that spirit, *as it was construed* by the Athenians and other followers of Iamblichus. But Neoplatonism accommodated more than one strand. First, Ammonius did not, as Praechter supposed, suppress recognition of the supreme divinity, the One, above the Intellect. Secondly, Ammonius' next successor but one, Olympiodorus, feels absolutely free to say that Theurgy gives us union with the intelligibles. The context of his statement is very interesting. After discussing five levels of virtue, he gives a role to Theurgy alongside Philosophy. Interestingly, he does not explicitly follow Iamblichus' idea that there is a special level of supreme human virtue, the theurgic, which would imply that other humans are less virtuous than theurgists. But at the point

where this might have been mentioned, he does allow that, while Philosophy makes us become intellect, Theurgy gives us union with the intelligibles (*Commentary on Phaedo*, Lecture 8, para 2, lines 1-20 Westerink).

This places Olympiodorus somewhere in between the Athenian followers of Iamblichus on the one hand and Plotinus and Porphyry on the other. Plotinus does not speak of Theurgy. Porphyry, in *On the Return of the Soul*, held, according to Augustine, that Theurgy merely purifies the imagination and so helps us to see visions, but does *not* purify intellect, and so cannot lead us to God (Augustine *City of God* 10.9, *CCL* 47, lines 13-35). Porphyry *Against the Christians*, fr. 76 Harnack, denies it matters what names you give to the gods. It is Porphyry's idea of humans 'imposing' names that Ammonius follows. Iamblichus, Syrianus and Proclus, then, should not be seen as the mainstream in Neoplatonism, but only as one stream that went in a different direction. Even one of Iamblichus' pupils, Theodore of Asine, refused to follow Iamblichus' acceptance of the *Chaldaean Oracles*, and Damascius, though admiring of Iamblichus' theology, is very critical of Proclus. Once this variety is taken into account, we can see Ammonius as returning to a position somewhere in between that of the Athenians and that of Plotinus. He was not obliged to see himself as betraying Neoplatonism, but as returning to a middle position.

Now we must add in that Ammonius kept his school open for another century, while Damascius had his closed. There must be value in keeping one's school open, if it is not at the cost of betraying one's values.

In sum, I have claimed that there were differences between Ammonius' Alexandria and the Athenian followers of Iamblichus, but that they were primarily differences about the role of pagan religious practice in the teaching, with doctrinal differences as merely secondary.

Logic and metaphysics

This volume starts with six chapters largely on the metaphysics of Aristotle's logical works, continues with six chapters on logic in a stricter sense, and finishes with six chapters on the metaphysics of the Neoplatonists' intelligible world. In introducing the commentators' treatment of logic and metaphysics, I shall inevitably touch again on some of the themes already discussed, but I shall be putting them in the new context of what else was happening in the field.

Prominent in the first part is the debate on Aristotle's scheme of categories, with Plotinus to a large extent (I follow the standard interpretation) representing a tradition of attack, and the later commentators seeking to defend. Even for the sensible world, Plotinus accepts only four of Aristotle's ten categories, and those with qualifications. The true substances, for Plotinus, are the intelligible Forms, and the sensible world merely reflects their activity. The result in the commentators is the most thoroughgoing investigation of Aristotle's categories ever written. One of the issues is

whether all the categories other than substance could not be boiled down to relatives and that depends on how Aristotle conceives relatives.

One major pair of topics affects both the lower and the higher metaphysics: universals and particulars. Plato's Forms were taken by Aristotle to be universals, and Aristotle's *Categories* was partly designed to show that universals are dependent on particulars, so that Plato has put things back to front in giving universal Forms the reality. For the universal, mankind, to exist, according to Aristotle, is for there to be *individual* humans. Aristotle also sometimes uses the term 'universal' (*katholou*) for universal *concepts*, and the first two Stoic heads agreed that concepts, rather than Forms, could best play the role of universals under which things fall. The third Stoic head, Chrysippus, may have substituted predicates, *lekta*, for concepts. Neither Aristotle nor the Stoics accepted that universals could also play the role of causes, as Plato's Forms were meant to. Alexander continued the process of deflating universals, making them thought-dependent, even though one or more passages treat universals in a more realist way. He further goes beyond Aristotle in tying the universality of a form to the contingent property of having at least two instances. The Neoplatonists cheerfully responded, in their harmonising way, by giving a role to many types of universal. Moreover, as we have seen, while they insisted on Forms, they began to see Forms first and foremost as causes, and not as unqualifiedly clear examples of universals: Simplicius *in Cat.* 82,35-83,20; Proclus *in Parm.* 880,3-11. By an irony, Porphyry's few surviving comments give some encouragement to the idea of universals as thought-dependent, and Boethius consciously passes on to the Latin-speaking Middle Ages Alexander's deflated conception of universals.

As regards particulars, there was discussion of what differentiates individuals from each other and of what makes them the same over time. Are they differentiated from each other by having a unique characteristic? Or by spatial separation? Or by matter? The Stoics had canvassed all three answers. Porphyry, writing for beginners, agrees with the Stoics insofar as he gives the individual unique characteristics and makes it a kind of species differentiated by those characteristics. But he is probably drawing on Platonism, we have seen, when he goes further and represents the individual as simply being a unique bundle of characteristics. However, since these ideas appeared in Porphyry's *Introduction* (*Isagoge*) to Aristotle, 7,16-24, later Neoplatonists, as we have seen, took them to be Aristotelian.

As for what makes individuals the same over time, the preferred answer was Aristotelian form, although this was analogous to the Stoics' unique characteristics. But what about the next life, if the universe recurs, or if there is chance reassembly, or if the Christian belief in resurrection is correct? Can the same form be recovered after an interruption? Most Christians preferred to insist on the same matter, but Origen opted for the same form and the Christian discussion had an uncanny parallel with the pagan ones. Moreover, both discussions are paralleled by modern treat-

ments of personal survival, for example those of Derek Parfit (*Reasons and Persons*, corrected edition, Oxford 1987), which consider survival in the context not of theology, but of science and science fiction.

As regards logic in a stricter sense, Aristotle was the founder, and his proudest claim was to have invented the syllogism. But the Stoics challenged his claim and supplied a version of syllogism much closer to modern logic. Each side maintained that the other could not accommodate important examples of argumentation. These debates are reflected in Alexander. We see developments in modal logic, also invented by Aristotle, and Neoplatonist contributions on the problem of induction and the nature of mathematics. Also significant is the treatment of language and the appeal to the efficacy of divine names in religious ritual to represent some names, contrary to Aristotle, as natural rather than conventional. It was here that Ammonius reverted to Porphyry's view of names as conventional.

The most impressive single piece of argumentation in this part (to my mind) is the very modern-sounding debate on commitment to the existence of the subject in singular and general statements. The Stoics, to the subsequent dismay of the Neoplatonists, denied that a general term like 'Man' in the subject position implied the existence of a Platonic Form, or of anything else. They analysed 'Man is a rational animal' as meaning merely, 'If anything is a man, it is a rational animal'. Alexander replied, on behalf of the Aristotelians, that the Stoics should have given the same treatment to singular terms in the subject position, since 'Socrates' in 'Socrates is dead' can hardly be taken to imply his existence. The rival analyses of such singular statements are in the highest degree impressive.

The metaphysics of the Neoplatonists' intelligible world is introduced in Chapters 13 to 18. We have encountered the three Neoplatonist levels of reality, Soul, Intellect and the One, and comparisons with the Christian Trinity. We also find a universe pervaded by consciousness at almost every level. The Neoplatonist belief that Plato's Forms are conscious may be based on a more straightforward reading of Plato's *Sophist* than the modern one, and this should serve as a warning that the Ancients are not the only ones to read Plato in the light of their own presuppositions. We shall see that the Neoplatonists were *realists* about the objects of intellectual thought (*nous*), even though the commentary tradition encouraged the idea of *intentional* objects for perception.

The notion of particulars becomes relevant again. The previous discussion belonged to the lower metaphysics, and was close to discussions in modern analytic philosophy. But Plotinus wrestles with the case of disembodied souls or intellects who, having achieved the happiest state, all have the same thought content. We have already encountered his question: how are they still differentiated? The problem is an important step in the build-up towards the Averroist controversy of the thirteenth century, when the differentiation of human intellects was required, if humans were to have immortal life. Plotinus can in the end only offer the analogy mentioned above. Each theorem in a system presupposes the whole system, yet

is a distinct theorem. Plotinus thus tries to allow for individual survival, even though he also thinks that the wish for individuality represents a kind of pride (*tolma*) and forgetting of one's true self which depends on one's higher origins. Themistius' brief endorsement of the individuality of intellects was influenced by Plotinus, but was to be used, as we have seen, by Thomas Aquinas against the Averroists. On the other side, 'Philoponus' says of the active intellect what Averroes was to say of all human intellect, that it is immortal only through the succession of mortal individual intellects.

Related to the concern with life beyond death is a view about the reality of time. The sense of timelessness involved in mystical experience is not an illusion, but a contact with a world that is more real than the world of time. As already mentioned, the physicist David Bohm, discussing the subject matter of his subsequent book, *The Implicate Order*, found Neoplatonist belief in time as a dependent reality, derived from a truer reality, to be exactly in tune with this own interpretation of the physical universe.

Another importance of the higher metaphysics has also been described above. Plotinus develops the inward turn in Western philosophy by making us look inwards into ourselves in order to find reality and truth.

Notes

1. H. Usener, *Göttingische gelehrte Anzeigen* 26, 1892, pp. 1001-22. K. Praechter, *Byzantinische Zeitschrift* 18, 1909, 516-38, translated into English in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, ch. 2.

2. Now in English: Olympiodorus *in Gorg.* (Jackson, Lycos, Tarrant); Calcidius *in Tim.* (partly in van Winden, den Boeft); Iamblichus fragments (Dillon); Proclus *in Crat.* in preparation (Duvick); Proclus *in Tim.* (Taylor); Proclus *in Tim.* forthcoming (Tarrant, Runia, Baltzly); Proclus *in Parm.* (Morrow, Dillon); Proclus *in Parm.* end of book 7 from Latin (Klibansky, Labowsky, Anscombe); Proclus *in Alcib. 1* (O'Neill); Olympiodorus and Damascius *in Phaed.* (Westerink); Damascius *in Phileb.* (Westerink); *Anonymous Prolegomena to Platonic Philosophy* (Westerink). See also extracts in Thomas Taylor, *The Works of Plato*, 5 vols (1804). French: Proclus *in Tim.* (Festugière); Proclus *in Remp.* (Festugière); Proclus *in Parm.* (Chaignet); Proclus *in Tim.* in preparation, new edition (Opsomer); Proclus *in Alcib. 1* (new edition by Segonds); *Anon. in Parm.* (Hadot); Damascius *in Parm.* (Chaignet, new edition by Westerink, Combès).

3. So H.J. Blumenthal, 'Plotinus in later Platonism', in H.J. Blumenthal and R.A. Markus, eds, *Neoplatonism and Early Christian Thought*, London 1981, 215; 217 and in 'Neoplatonic elements in the *de Anima* commentators', *Phronesis* 21, 1976, 64-87, repr. in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, see 312-13.

4. By John Sellars in Peter Adamson, Han Baltussen, Martin Stone, eds, *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries, Bulletin of the Institute of Classical Studies*, supp. vol. 2004, forthcoming.

5. Angelos Chaniotis, 'New inscriptions from Aphrodisias', *American Journal of Archaeology*, forthcoming.

6. *In Metaph.* 206,12-207,4 is cited by Arthur Madigan, 'Alexander on Aristotle's species and genera as principles', in Lawrence P. Schrenk, ed., *Aristotle in Late*

Antiquity, Washington DC 1994, 76-91, and Alexander is elsewhere ready to complain of fallacy (*paragôgê*) in Aristotle.

7. Polymnia Athanassiadi, *Damascius. The Philosophical History*, Athens 1999.

8. Michel Tardieu, *Les paysages reliques: routes et haltes syriennes d'Isidore à Simplicius*, Leuven 1990.

Michel Tardieu, 'Sabiens coraniques et "sabiens" de Harran', *Journal Asiatique* 274, 1986, 1-44.

Michel Tardieu, 'Les calendriers en usage à Harran d'après les sources arabes et le commentaire de Simplicius à la Physique d'Aristote' in I. Hadot, ed., *Simplicius, sa vie, son œuvre, sa survie*, Berlin & New York 1987, 40-57.

I. Hadot, 'La vie et l'œuvre de Simplicius d'après des sources grecques et arabes' in I. Hadot, ed., *Simplicius, sa vie, son œuvre, sa survie*, Berlin & New York 1987, 3-39, in English in Richard Sorabji, ed., *Aristotle Transformed*, London and Ithaca NY 1990.

I. Hadot, *Simplicius. Commentaire sur le Manuel d'Epictète*, Leiden 1996, ch. 2.

One part of Tardieu's evidence concerning calendars has been attacked, with reply in I. Hadot 1996, by Paul Foulkes, 'Where was Simplicius?', *Journal of Hellenic Studies* 112, 1992, 143; S. van Riet, 'À propos de la biographie de Simplicius', *Revue Philosophique de Louvain* 89, 1991, 506-14. There is further disagreement in Concetta Luna, *Mnemosyne* 54, 2001, 482-504, reviewing a restatement of Tardieu's theory by R. Thiel.

Objections to the Arabic evidence, though still needing further assessment, are made by Joep Lameer, 'From Alexandria to Baghdad: reflections on the genesis of a problematical tradition', in G. Endress, R. Kruk, eds, *The Ancient Tradition in Christian and Islamic Hellenism*, CNWS publications, Leiden University, Leiden 1997, 181-91.

For the excavation of the possible school houses of Proclus and of Damascius in Athens, both abandoned by their pagan occupants, see Alison Frantz, 'Pagan philosophers in Christian Athens', *Proceedings of the American Philosophical Society* 119, 1975, 29-38; Polymnia Athanassiadi, *Damascius. The Philosophical History*, Athens 1999, Appendix I.

9. Carlos Steel, 'Plato Latinus (1939-1989)', in *Rencontres de cultures dans la philosophie médiévale: traductions et traducteurs de l'antiquité tardive du XIVe siècle*, Louvain-la neuve, 1990, 301-16, contrasts the reception in Latin of Plato and of Aristotle.

10. See H.D. Saffrey, 'How did Syrianus regard Aristotle?', translated from the French of 1987, in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990; Carlos Steel, 'Why should we prefer Plato's *Timaeus* to Aristotle's *Physics*? Proclus' critique of Aristotle's causal explanation of the physical world', in Robert Sharples, Anne Sheppard, eds, *Ancient Approaches to Plato's Timaeus, Bulletin of the Institute of Classical Studies* suppl. vol. 78, 2003.

11. For the following, see:

Karl Praechter, 'Richtungen und Schulen im Neuplatonismus', *Genethliakon für Carl Robert*, Berlin 1910, 'Christlich-neuplatonische Beziehungen', *Byzantinische Zeitschrift* 21, 1912.

H.D. Saffrey, 'Le Chrétien Jean Philopon et la survivance de l'école d'Alexandrie', in *Revue des Études Grecques* 67, 1954, 400-1.

L.G. Westerink, 'The Alexandrian commentators and the introductions to their commentaries', in Richard Sorabji, ed., *Aristotle Transformed*, London and Ithaca, NY 1990, ch. 14, 327, revised from *Anonymous Prolegomena to Platonic Philosophy*, Amsterdam 1962, Introd., xxxiiff.

A.C. Lloyd, 'The later Neoplatonists', in A.H. Armstrong, ed., *The Cambridge History of Later Greek and Early Medieval Philosophy*, Cambridge 1970, 316.

I. Hadot, *Le problème du néoplatonisme Alexandrin: Hiéroclès et Simplicius*, Paris 1978.

Koenraad Verrycken, 'The metaphysics of Ammonius son of Hermeias', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, ch. 10.

Richard Sorabji, 'The ancient commentators on Aristotle', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, ch. 1, 12.

12. Polymnia Athanassiadi, *Damascius. The Philosophical History*, 30-2; Richard Sorabji, 'Divine names and sordid deals in Ammonius' Alexandria', in Andrew Smith, ed., *Neoplatonism and Society*, Cardiff 2004.

13. Anne Sheppard, 'Proclus' philosophical method of exegesis: the use of Aristotle and the Stoics in the Commentary on the *Cratylus*', in J. Pépin, H.-D. Saffrey, eds, *Proclus, Lecteur et interprète des anciens*, Paris 1987, 137-51.

14. On Origen see John Dillon, 'The magical power of names in Origen and later Platonism', in R. Hanson, H. Crouzel, eds, *Origeniana Tertia*, Rome 1985, 203-16; J. Daniélou, 'Eunome l'Arien et l'exégèse neoplatonicienne du *Cratyle*', in *Revue des Études Grecques* 69, 1956, 412-32.

15. Robbert van den Berg, 'Smoothing over the differences: Proclus and Ammonius on Plato's *Cratylus* and Aristotle's *De Interpretatione*', in Peter Adamson, Han Baltussen, Martin Stone, eds, *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries*, Institute of Classical Studies, suppl. vol., London 2004.

16. Philippe Hoffmann, 'Simplicius' polemics', in Richard Sorabji, ed., *Philoponus and the Rejection of Aristotelian Science*, London & Ithaca, NY 1987, ch. 3 at p. 72.

1. The Character of Logic

1(a) Aristotle's logic

This volume studies logic in the broad sense that corresponds to Aristotle's logical works and includes, as we shall see, a certain amount of metaphysics. Porphyry wrote an *Introduction* (*Eisagôgê*, sometimes written as *Isagoge*), also called in Latin the Five Expressions (*Quinque Voces*), because it discusses five key terms: genus, species, differentia, property and accident. He intended it to throw light on Aristotle's categories and on definition, division and demonstration. The *Isagoge* itself became the subject of commentaries, and the commentators saw it as useful for the whole of philosophy. It will be drawn on here especially for its important remarks on universals and particulars.

The standard order of Aristotle's writings was, at least until a recent sceptical article,[1] thought to have been established by the first of the commentators of the Aristotelian school, Andronicus, around 60 BC. According to the standard explanation, we start with Aristotle's *Categories*, because this discusses individual terms, arranging them into categories, starting with substance, quantity, quality, relative. On the question whether the terms are words, concepts, or things, Porphyry's compromise came to be orthodox among later Greek commentators: they are *words* insofar as they *signify things*.[2] The distinction of categories might well be classified nowadays as a piece of metaphysics, but if so, Porphyry's insistence remains important, that the discussion concerns only the metaphysics of the *sensible* world.[3] In Neoplatonism, the sensible world is produced by a higher intelligible world and these two worlds constitute a universe of beings which the Neoplatonists regard as conscious. Hence the metaphysics of the Neoplatonist universe is further revealed through the readings in the **Psychology** volume.

Aristotle's second work in the standard arrangement is *On Interpretation*, in which he studies the logical relations and truth values of whole propositions, but especially[4] of pairs of opposed propositions. He has to preface this study with a brief distinction of name and verb and a brief, but extremely influential, discussion of the meaning of words.

In a work standardly placed fifth (though Adrastus disagreed, *ap.* Simplicium *in Cat.* 16,1), the *Topics*, Aristotle exploits the discussion of opposed propositions by providing a handbook of rules for dialectical debate. It is here that Porphyry's distinction of five expressions is most fully explained, since an analogous set of four so-called predicables, genus, definition, peculiar property, and accident, form the subject matter of dialectical debate. The purposes of dialectical debate range from the discovery of the first principles of science to countering the tricks of sophists. Of the former an example would be the discussion in *Physics* Book 4 of the nature of place and time. This is discovered through a number of considerations such as would arise in dialectical debate with another person, or with oneself. The latter is discussed in what is sometimes treated as the ninth book of the *Topics* and sometimes as a separate work, *On Sophistical Refutations*.

In the work standardly placed third, the *Prior Analytics*, Aristotle expounds his great discovery, the deductive syllogism, the pattern of argument in which he distinguished fourteen valid moods, arranged into three figures. Aristotle also

founded modal logic, by classifying those syllogisms which concern possibilities and necessities.

Finally, in the work standardly placed fourth, the *Posterior Analytics*, Aristotle applies the syllogism to his account of scientific method. The scientist starts from definitions of the key terms in a science, and uses the defining characteristics of his subject matter to explain the non-defining characteristics. The scientist expounds these explanations in the form of syllogisms. Moreover, in discovering his definitions, he keeps a check on himself by seeing whether a proposed definition will indeed generate the right kind of explanatory syllogism. Since his subject matter is not individual things and events, in Aristotle's conception, but kinds of thing and event, his syllogisms have a corresponding generality.

Aristotle's *Poetics* contains ideas on Philosophy of Language, for example on parts of speech and on metaphor. And his *Rhetoric* has important remarks on inference, which may have influenced the later theories of inference in the rival Stoic school.[5] These two works are arranged in our standard order as works concerning practical production. But there is some basis for the medieval Islamic classification of them as belonging among the logical works,[6] even though Averroes was left notoriously baffled by the main subject of the *Poetics*, tragedy and comedy, which he understood respectively as panegyric and invective.[7]

The most intensive discussion was reserved by the ancient commentators for the first work in Aristotle's corpus, the *Categories*, and the categories will therefore occupy a substantial quantity of space, after some preliminary comments on methodology.

[1] Jonathan Barnes, 'Aristotle at Rome', in J. Barnes, M. Griffin, eds, *Philosophia Togata*, vol. 2, Oxford 1997.

[2] Porphyry *in Cat.* 57,7-8; 58,5-7; 91,19; *ap.* Simplicium *in Cat.* 10,22-3.

[3] Porphyry *in Cat.* 91,19-27.

[4] John Whitaker, *Aristotle's de Interpretatione: Contradiction and Dialectic*, Oxford 1996.

[5] Myles Burnyeat, 'Enthymeme: Aristotle on the logic of persuasion', in D.J. Furley and A. Nehamas, eds, *Aristotle's Rhetoric: Philosophical Essays*, Proceedings of the 11th Symposium Aristotelicum, Princeton 1994, 3-55.

[6] Maroun Aouad, Marwan Rashed, 'L'exégèse de la *Rhétorique* d'Aristote: Recherches sur quelques commentateurs grecs, arabes et byzantins', *Medioevo* 23, 1997, 43-189.

[7] See the short story by Jorge Luis Borges, 'Averroes' Search', in his *Labyrinths*, Harmondsworth, 1970.

1(b) Is logic a part or an instrument of philosophy?

The Aristotelians, following Aristotle *Top.* 163b9-11, called logic an instrument (*organon*) and ascribed to the Stoics the view that it was a part. This relates *inter alia* to the debate, recorded under **8(a)** below, in which the Aristotelians complained that Stoic syllogisms failed to serve as a useful instrument (*organon*) for showing things. Their syllogisms were inference patterns studied for their own sake, however uninformative.

But, as Katerina Ierodiakonou has insisted, there are other arguments too deployed in the debate. The Stoics are said to argue that logic is a product (*ergon*) of philosophy and so either a part, or a sub-part of it. But it is not a sub-part, because its subject matter (propositions) and its purpose (here more narrowly described than the Stoics would have liked, as showing how things may be deduced)

is different from that of other parts. The Aristotelians reply that logic is analogous to hammer and anvil, which, though products of the smith's art, are not parts, but instruments, of that art. Logic is also an instrument of other disciplines, to which it could not be so subordinated if it were an actual part of philosophy. Olympiodorus adds on the Aristotelian side the argument that logic is not part of philosophy, because its subject matter (utterances) and its purpose (generating demonstrations) is different from that of philosophy taken as a whole.

Ammonius as a Platonist takes a third view to be more appropriate. Logic can be merely an instrument and in Aristotle's hands it is, when he offers his rules of syllogism in terms of As, Bs and Cs. But Plato had often used arguments involving concrete examples, and so in his hands logic is often a part of philosophy.

Plotinus 1.3 [20] 4-5 (not translated) took a different view again and contrasted Aristotelian logic as an instrument with Platonic dialectic as a part, and the best part, of Philosophy.

(1) Alexander *in An. Pr.* 1,7-3,29

Since logic is the product of philosophy, some people think that it is also a part of philosophy. Others, however, say that it is not a part but an instrument of philosophy.

Now those who say that it is a part were led to their view by the following consideration. Just as philosophy concerns itself with the other items which are universally agreed to be parts of philosophy, making it its business to discover and order and construct them, so too it concerns itself with the study before us. But although this study is the product of philosophy, it is not a subpart of either of the other parts of philosophy – neither of the theoretical nor of the practical part. For its subject matter is different from theirs, and the purposes of the three are distinct. The theoretical and the practical parts differ from each other in certain ways, and in virtue of these differences they are co-ordinate with one another; logic differs from each of them in the same ways, and therefore it may reasonably be taken as co-ordinate with them. It differs from them both in subject-matter (for its subject-matter consists of statements and propositions) and also in its end and purpose (for its purpose is to prove that, when propositions are compounded with one another in certain ways, something may be deduced by necessity from what is posited or conceded – and this is not the end of either of the other parts).

[2,3] Those who claim that logic is not a part but an instrument of philosophy reply as follows. For something to be a part of an art or science it is not enough that the art or science is concerned with it in the same way as it is concerned with each of the other parts which it studies. For something is judged to be a part not merely because it is an object of attention and study, but when, in addition, its end and construction do not make reference to anything other than those very things which the science in question studies, i.e. when it is not investigated and constructed for the sake of these other items. For if something makes reference to the needs of other items which fall under the same science or art, then it cannot properly be taken as co-ordinate with them, since it is for their sake that

it exists and comes into being; nor can it be a part in the way in which they are, since it exists for their sake. For if something makes reference to certain items, and if its end is given attention insofar as it contributes to the discovery and construction of other items, then it is the instrument of those items. With distinct arts, the product of one is the instrument of another if its end makes reference to the needs of what is made by the art whose instrument it is; similarly, if the things made by a single science or art have such a ranking in relation to each other, then one will be an instrument and the other – the higher one – will be both the product and a part of the science. A hammer and anvil are not precluded from being an instrument of the smith's art by the fact that they are its product.

[2,22] Moreover, those who call logic a part of philosophy must admit that a part of philosophy is an instrument of those other sciences and arts which use syllogisms and demonstrations to establish and construct the objects of their own concerns. For they use them, but not as parts of themselves (since it is impossible for the same thing to be a part of different sciences, nor does any of these sciences study the construction and discovery of syllogisms); hence they will be using them as instruments. But if so, and if one art or science dominates another whenever it uses in its own production the product and end of the other art, whose own product makes reference to its needs (as bridle-making in relation to the art of riding and ship-building in relation to the pilot's art), then according to these people there will be other sciences and arts more perfect than philosophy, namely those which have a part of philosophy as their instrument.

[2,35] They might say that not all the study of logic makes reference to the discovery and construction of what philosophy investigates or of what some other science or art theorises about or investigates, but that there are things logic theorises about and investigates which have no utility at all.

[3,2] In that case, first, they will concede that the earlier thinkers who developed the study of logic to the extent of its utility were right to call it an instrument and not a part.

[3,5] Secondly, according to them, what is useful in logic is an instrument and it is what is not useful which will be a part. But if what is useful is better and worth more attention and study, then for them the better sub-part of logic will be an instrument of philosophy and the other sciences and arts, and what is worth less attention will be a part. Yet in all cases, an instrument has a lower status than any product which is a part.

[3,10] Again, if logic is given attention in order to exercise the mind for making discoveries among items which the parts of philosophy investigate, then in this way too, it will have the status of an instrument. If, on the other hand, logic is studied in order to gain knowledge of the truths it contains in itself, then it will become a sub-part of theoretical philosophy; for it is this which has knowledge as its end. But if you theorise about useless items in accordance with logical method, what good does *that* contain which might make it worth attention as a part of philosophy? What is worth attention should either make reference to something else which is desir-

able in itself, or else contain in itself something worthy of attention. For it is not all and any knowledge which is worthy of philosophy (some things it is better to be ignorant of), but only knowledge of what is divine and valuable – that is, of the things created by the divine art of nature. It is clear from its very name that theorising is concerned with the sight and knowledge of what is divine; for it means seeing what is divine. That is why we say that theoretical philosophy is knowledge of what is divine and of what comes about or is constituted by nature; for knowledge of such things is in itself worth attention. But where the things theorised about neither make reference to anything else nor contain in themselves anything excellent and valuable, then knowledge of them, being utterly superfluous, is not appropriate to philosophy – it is a waste of labour. For it is above all appropriate to philosophers that, as they should never act at random, so too they should never theorise in this way; their theorising, like their actions, should be delimited. B,B,F,I

(2) Ammonius *in An. Pr.* 10,34-11,14

They do say something with respect to that which is true, although they do not lay hold of the truth completely. For, according to Plato and true reason, it is neither a part, as the Stoics and some of the Platonists say, nor is it solely an instrument, as the Peripatetics say, but it is both a part and an instrument of philosophy. For, if you consider arguments along with their objects – for instance, syllogisms themselves along with the objects that underlie them – it is a part; if, however, [you consider them] as empty schemata without the objects, it is an instrument. So, the Peripatetics do well to attend to Aristotle's remarks and say that logic is an instrument. For he puts forward empty schemata, considering not the underlying objects but applying the schemata to letters: 'A [holds] of every B, B of every C, therefore A of every C', for example. Plato, however, uses logic as both a part and an instrument, for when he applies these schemata to objects and uses syllogisms upon objects, when, for instance, he says, 'the soul is a self-mover, the latter is eternally moving, the latter is immortal, therefore the soul is immortal', then, in using logic along with the objects that underlie it, he uses it as a part. When, however, he puts forward only deductive methods, i.e., empty schemata without objects, he uses logic as an instrument. KF

(3) Olympiodorus *in Cat.* 16,10-27

Second argument taking the following course: the part needs to have the same subject matter (*hulê*) and the same purpose as the whole. Logic has neither the same subject matter as the whole, I mean as philosophy, nor the same purpose. Therefore logic is not a part of philosophy, but an instrument. Let us establish each of the premisses, the major as follows, that is the one that says the part has the same subject matter as the whole

and the same purpose. We will say that what is said is true. At any rate, the dietary part of the medical art has the same subject matter as the art, I mean human bodies, and the same purpose, e.g. health, for both are concerned with health. So the major premiss is already confirmed. Still more is the minor premiss confirmed, the one that says logic has neither the same subject matter as the whole nor the same purpose. For in truth there is not the same subject matter for logic and philosophy, but that of logic is utterances and that of philosophy is things, as shown by the definition which says that it is knowledge of things divine and human. Nor yet is the purpose of each the same. But the purpose of philosophy is assimilation to God, so far as is possible for humans, as has been said, while that of logic is generating demonstrations. RRKS

Reading

Jonathan Barnes, *Logical Form and Logical Matter*, Florence 1990, 9-12.

I. Hadot, ed., *Simplicius. Commentaire sur les Catégories*, fasc. 1, Introduction, Leiden 1990, Appendix 1, 183-8.

P. Hadot, 'La logique, partie ou instrument de la philosophie?', in I. Hadot, ed., *Simplicius, Commentaire sur les Catégories*, fasc.1, Introduction, Leiden 1990, Appendix 1, 183-8.

Katerina Ierodiakonou, 'Aristotle's logic: an instrument, not a part of philosophy', in N. Avgelis, F. Peonidis, eds, *Aristotle on Logic, Language and Science*, Thessaloniki 1997, 33-53.

P. Kotzia-Panteli, 'Logik: Teil oder Werkzeug der Philosophie', in F. Berger *et al.*, eds, *Symbolae Berolinenses für Dieter Harlfinger*, Amsterdam 1993, 175-85.

Tae-Soo Lee, *Griechische Tradition der aristotelischen Syllogistik in der Spätantike*, Göttingen 1984.

A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, 17-21.

Ian Mueller, 'Stoic and Peripatetic logic', *Archiv für Geschichte der Philosophie* 51, 1969, 173-87, at 184.

L.G. Westerink, 'Elias on the *Prior Analytics*', *Mnemosyne* 14, 1961, 126-39.

2. Methodology

2(a) Methodology of the commentators

Questions of methodology were treated by the Neoplatonist commentators in the introductions to their commentaries on Aristotle's logic. The methodology of the commentators has been very fully discussed in *Aristotle Transformed*, which should be consulted, so here I shall be brief. Many of the later Neoplatonist commentaries, though not all, represent lecture courses from a syllabus which treated Aristotle's works as a preliminary to Plato's and which had a fixed order for studying the works of each. By very hard work, Proclus managed to complete his study of Aristotle in two years. The course would start with Aristotle's logic and culminate with an ascent to God, facilitated by the study of Plato.

(i) Harmony of Plato and Aristotle and qualities of the commentator

The belief in harmony between apparently conflicting schools started much earlier than our commentators, being prominent as early as the Platonist, Antiochus in the first century BC. On some issues, we find more harmonisation of Plato with Aristotle in Middle Platonism than we do in the later commentators of our period. This would probably be true for example of the combination of Aristotle's empiricist and Aristotle's rationalistic account of concepts in the Middle Platonist work of Alcinous (*Didaskalikos* ch. 4). I shall argue in **5(c)** below that many, though not all, of our Platonist commentators, especially Syrianus and Proclus, rejected Aristotle's account of concepts, rather than trying to harmonise it with Plato's.

Nonetheless, harmonisation was extensive, not among the Aristotelians, but among the Neoplatonists, even though it was upheld to different degrees by different thinkers. Part of the motivation in our period for harmonisation was the pressure from Christian charges of mutual disagreement among pagan thinkers. An example of harmonisation is the defence of Aristotle's *Categories* as compatible with Plato, a defence that started, on the standard view which I endorse, with Porphyry in the late third century. Those least inclined to harmonise were perhaps Syrianus and his pupil Proclus. They still recognised that Aristotle did not accept Plato's theory of Forms or Ideas, nor his belief that God was causally responsible for the existence of the cosmos. But not everyone recognised this disharmony. Iamblichus is accused of having made Plato and Aristotle agree on the theory of Forms, while later a contemporary of Syrianus, Hierocles of Alexandria, made Plato and Aristotle agree on God's causal responsibility for the cosmos. Proclus' pupil, Ammonius of Alexandria, who, along with Porphyry was perhaps the most inclined to harmonise, claimed harmony on both issues and wrote a whole book to show that Aristotle's God was the creative efficient cause of the world's existence. A summary of the arguments from it by Simplicius *in Phys.* 1361,11-1363,12 is translated in the **Physics 8(c)**. Two passages claiming harmony on the theory of Ideas are cited below from the commentary taken from the voice, i.e. from the seminars of Ammonius by his pupil, Asclepius. The widespread Neoplatonist belief that Aristotle agreed with Plato on the immortality of the rational human soul is

explained in **Psychology 12(b)**. By an irony the harmonisation on the immortality of soul and creation of the world, which was partly motivated to stave off Christian attacks, ended up in the thirteenth century by helping to make Aristotle acceptable to Christianity.

The need to display, within reason, the harmony of Plato and Aristotle, bears on the qualities required of a commentator, as Simplicius says below. He should not be a partisan of Aristotle, like Alexander, or other members of the Aristotelian school, but he should not needlessly find disagreements with the truths discovered by Plato. Philippe Hoffmann has shown how Simplicius complains against the Christian Philoponus that this is exactly what he does, *in Cael.* 84,11-14; 159,2-9. In Simplicius' view, the good commentator finds Plato and Aristotle in harmony on most points. When they are found to disagree by Neoplatonists, the norm is to think that Plato must be right. But a late commentator, Olympiodorus, at *in Cat.* 112,19ff., judges that in Aristotle *Cat.* ch. 7, the first definition of relatives, taken to be Plato's, is wrong, while the second, taken to be Aristotle's, is right.

Among the remaining extracts, Hierocles seems to assimilate Aristotle to Plato on the belief in immortality of the soul. Syrianus, who can be highly critical of Aristotle, nonetheless seeks at *in Metaph.* 80,4-7 to protest his admiration. Proclus' speedy two years of studying Aristotle produced some bizarre interpretations, e.g. *in Tim.* 1. 6-21-7,16, some alleging disharmony, e.g. complaining of a lack of interest in form in Aristotle's zoology, others alleging harmony, e.g. by presenting Aristotle as merely copying Plato in his postulation of a fifth element composing the heavens. (See further **Physics 23**.)

(1) Simplicius *in Cat.* 7,23-32

The worthy exegete of Aristotle's writings must not fall wholly short of the latter's greatness of intellect (*megalonoia*). He must also have experience of everything the Philosopher has written, and must be knowledgeable (*epistêmôn*) about Aristotle's style. His judgement must be impartial (*adekaston*), so that he may neither, by understanding it frivolously, present as unsatisfactory something that has been well said, nor, if some point should require attention, should he obstinately persist in trying to demonstrate that [Aristotle] is always and everywhere infallible, as if he had enrolled himself in the Philosopher's school. With regard to what is said by [Aristotle] against Plato, the good exegete must, I believe, not convict the philosophers of discordance by looking only at the letter (*lexis*) [of what they say]; but taking into consideration the spirit (*nous*), he must track down (*anikhneuein*) the harmony which reigns between them on the majority of points. MCh

(2) David (Elias in *CAG*) *in Cat.* 123,1-3

It is necessary that he (the commentator) not sympathise with a certain school, which happened to Iamblichus. For this man, being devoted to Plato, concedes to Aristotle that he does not disagree with Plato about the Ideas. IC

(3) Hierocles of Alexandria *On Providence ap.* Photium *Bibliotheca* Bekker 171b33ff. (= vol. 3 Henry, Budé 125,33-126,1)

The declared purpose of the present inquiry about Providence is to grasp it by putting together Aristotle's opinion with Plato's. It wants to harmonise (*sunaptein*) these two men in their opinion not only in their accounts of Providence, but also in all their arguments that the soul is immortal and in any of their philosophy concerning the heavens and the cosmos. As for these interpreters who set these two men at loggerheads, the inquiry refers to them as having strayed extremely from the purpose (*prothesis*) of the two men and as having fallen away from the truth. Some put this burden on themselves voluntarily because they are contentious and rebellious, others by being enslaved to prejudice and ignorance. RRKS

(4) Syrianus *in Metaph.* 80,4-7

I am not among those who are quarrelsome, and even less am I one of those who register as Aristotle's students in a few things or on random matters, but am among those who marvel at his rational methods in everything, and who are exceedingly receptive of both his ethical and his physical philosophical treatises. RRKS

(5) Proclus *in Tim.* 1.6,21-7,16

I also think that because the superhuman (*daimonios*) Aristotle emulated the teaching of Plato as far as was in his power, he laid out his entire treatise on Nature in the following way. He saw the things common to all naturally constituted entities: form and substrate and that from which change has its origin and change [itself] and time and place (things indeed which Plato has related here [in the *Timaeus*]), and both extension (*diastêma*) and time which is an image of eternity and is coexistent with the heavens, and the different forms of change and the joint causes of natural things, as well as the distinctive (*idia*) properties of things that are distinguished with respect to essence. Of these [properties], first are those that belong to the heavens (agreeing with Plato to the extent that he makes the heavens ungenerated and of the fifth substance; after all what difference is there in speaking of the fifth element as opposed to the fifth world or fifth shape as Plato called it?). Second are those properties which are common to every created constitution, with respect to which one might be amazed that Plato observed their essences and capacities with great accuracy and rightly retained both their harmony and contrarieties. Of those properties which have to do with coming to be, some belong to atmospheric phenomena, the principles of which Plato taught, whereas Aristotle extended the teaching beyond what was necessary; and some relate to the study of animals, which in Plato are articulated in terms of all the causes, the final and co-operative ones [see **Physics 6(d)-(e)**], whereas

in Aristotle they are hardly studied at all and in only a few cases in terms of form. For with most things he stops with matter and by giving explanations of physical things from matter, he [Aristotle] shows us the extent to which he is distant from the guidance of his teacher [Plato]. IC

(6) Asclepius from the voice of Ammonius *in Metaph.* 69,17-21, translated under **5(c)** below

(7) Asclepius from the voice of Ammonius *in Metaph.* 71,26-9

Next he wishes to talk of the reasons as a result of which they suppose the Ideas exist. And by saying '... further, according to the methods by which *we* prove the Ideas ...' he includes himself as belonging to the same school, that is, the Platonic. PA

(8) Simplicius *in Cael.* 84,11-14

But since (I cannot tell why) Plato's doctrines seem to appeal to our man [Philoponus], although he has not received instruction in them, as they say, and although he does not try to find (*ezêtêkota*) the real meaning of Plato's thought (*noun*) with a true love of knowledge (*philomathôs*), and although for this reason he thinks at one moment that Plato's doctrines tally with his own fantasies (*phantasiais*), at another that they clash (*enantiousthai*) with Aristotle's .... Ph Hof

(9) Simplicius *in Cael.* 159,2-9

I think he [Philoponus] will rightly be judged not an eager learner any more, but a late learner. For when people practised in arguments since childhood hear some apparent disagreement, especially on the part of men like these, they calmly investigate, if such statements can in any way agree with each other, seeing that they have already found many apparent disagreements to be agreements. But late learners look at few things and, stunned by the apparent disagreement, incline towards one or the other view haphazardly and condemn the one that remains. RRKS

Reading

P. Hadot, 'The harmony of Plotinus and Aristotle according to Porphyry', translated from the French of 1974, in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, ch. 6.

Philippe Hoffmann, 'Simplicius' polemics', in Richard Sorabji, ed., *Philoponus and the Rejection of Aristotelian Science*, London & Ithaca, NY 1987, ch. 3.

Jaap Mansfeld, *Prolegomena: Questions to be Settled Before the Study of an Author or Text*, Leiden 1994.

Richard Sorabji, 'The ancient commentators on Aristotle', in *Aristotle Transformed*, 2-5.

L.G. Westerink, 'The Alexandrian commentators and the introductions to their commentaries', in Richard Sorabji, ed., *Aristotle Transformed*, ch. 14, revised from his *Anonymous Prolegomena to Platonic Philosophy*, Amsterdam, 1962.

(ii) Order of study

The Neoplatonist order of study of the works of Aristotle and Plato was designed to lead people up to God, starting from Aristotle's logic and finishing with Plato. There were two Plato cycles, as described in the *Anonymous Prolegomena*, one culminating in Plato's *Philebus* on the Good, and one consisting of his *Timaeus* on the divine Intellect, and his *Parmenides* on the One. The order of study and the peculiar views on the supposed single aim of each Platonic dialogue, are said to have been established by Iamblichus.

As for the earlier part of the course, there was much disagreement on the right order for ethics, mathematics and physics, on which see e.g. Olympiodorus *Prolegomena* 8,29-9,12, and Ammonius *in Isag.* 12,20-13,7, both translated in **Psychology 15(a)**. On one view, a preliminary non-Aristotelian ethics was needed, because (Ammonius *in Cat.* 5,31-6,9; Simplicius *in Cat.* 5,3-6,5) Aristotle's ethics presupposed logic. Hence we have Simplicius' commentary on Epictetus, but the only extant commentaries on Aristotle's ethics up to 600 AD are not by Neoplatonists (Porphyry's is lost). The reading of Aristotle would then start with the logical works, prefaced by Porphyry's *Isagoge* (*Introduction*). After that came Aristotle's ethics (if it was read), physics, and then his theology, with mathematics sometimes as a preliminary to the whole sequence and sometimes coming late as a bridge from physics to theology, as recommended below by Ammonius, who gives a fuller rationale in *in Isag.* 12,20-13,7, translated in **Psychology 15(a)**.

(10) Ammonius *in Cat.* 5,31-6,22

In the third place, let us ask where one should begin [reading Aristotle]. The natural sequence would be to begin with the ethical treatise, so that after first disciplining our own character, we might in that way get to the other writings. But he has used demonstrations and syllogisms in that [the ethical treatise], too, and we are likely to be ignorant of them, being untutored in this kind of discourse. So, for this reason, we must begin with logic, having first, of course, disciplined our own character without the ethical treatise. After logic we must go on to ethics, and then take up the physical [treatises], and after those the mathematical ones, and finally the theological ones.

[6,9] In the fourth place, in addition to these [questions], one must ask what purpose and what obvious utility the Aristotelian philosophy has for us. We answer that it is to ascend to the common principle (*arkhê*) of all things and to be aware that this is the one goodness itself, incorporeal, indivisible, uncircumscribed, infinite and of infinite potentiality. For [goodness] is not the only thing that is good. Notice that just as what we call white is a body that has received whiteness, whereas [what we call] whiteness is the quality itself, so too a body that has received goodness and participates in it is called good, whereas goodness is a kind of substance and being (*huparxis*). In the fifth place, in addition to these [questions], let us ask what will guide us to the aforementioned principle. And we reply: first, the ethical treatise, and then after that the one on physics, and then the mathematical one, and finally after these we will grasp theology. GMat&MC

(11) Anonymous *Prolegomena* ch. 26, lines 16-58 Westerink

The divine Iamblichus selected out twelve [of Plato's] dialogues and called some of those physical and some theological. And he further reduced these twelve down to two, that is the *Timaeus* and the *Parmenides*, of which the *Timaeus* represents all physical dialogues and the *Parmenides* all theological. It is worthwhile to consider the order of these dialogues because all previous commentators thought it worthwhile to discuss them. First, then, it is necessary to treat the *Alcibiades* because from it we learn about ourselves, and it is worthwhile to know about ourselves before we know about those things outside ourselves; for how can we have knowledge of external things if we lack knowledge of ourselves? The last dialogue to be treated [sc. in the first cycle] is the *Philebus*, since in that dialogue he treats the Good, that which is beyond all things. So it is necessary for that which is beyond all things to be last of all.

[29] Those in between should be ordered as follows: as there are five rungs (*bathmoi*: Theiler) of ethical virtues – the natural, the virtues of character, civic, purificatory and contemplative – first we must read *Gorgias* as it has to do with civic virtue, and secondly the *Phaedo*, as it is purificatory, because the purificatory life comes after the civic life. Then we come to knowledge of the 'things that are' (reality) which proceeds from contemplative (*theôrêtikê*: Theiler) virtue. These 'things that are' are perceived either in thought or in physical things. Following the dialogues we have already mentioned, it is necessary to read, fourthly, the *Cratylus*, because it teaches us about words, and then the *Theaetetus*, because it teaches us about physical things. Then we come to the [lacuna] <*Sophist* and *Statesman* [Westerink]> which teach us about natural philosophy. And then on to the *Phaedrus* and the *Symposium* which are contemplative and discuss theological matters. And then it is necessary to come to the perfect dialogues, I mean the *Timaeus* and the *Parmenides*. We have thus spoken of the twelve.

[45] Since some consider it worthwhile to treat the *Laws* and the *Republic*, it is equally worthwhile to speak of the object of these two. There are, then, three types of constitution – that arising from reform, that based on specified conditions [hypotheses] and that not based on specified conditions [hypotheses]. A constitution arising from reform comes about when our soul having been in an evil condition, we regain our [previously] unperverted condition; and a constitution based on specified conditions comes about when citizens turn principles and certain conditions into laws; and a constitution not based upon specified conditions comes about when nothing belongs to the individual but all things are in common, so that what is mine is yours and what is yours mine, and the property of each individual is at the same time both his own and that of another. Plato has dealt with the reformed state in the *Letters*, that based upon specified conditions in the *Laws*, and that not based upon specified conditions in the *Republic*. MR

Reading

A.-J. Festugière, 'L'ordre de lecture des dialogues de Platon aux 5e/6e siècles', *Museum Helveticum* 26, 1969, 281-96, repr. in his *Études de philosophie grecque*, Paris 1971, 535-50.

M. Richard, '*Apo phônês*', *Byzantion* 20, 1950, 191-222, English translation of the French by Victor Caston, in the library of the Institute of Classical Studies, University of London.

L.G. Westerink, *Anonymous Prolegomena to Platonic Philosophy*, Amsterdam 1962, esp. xxxvii-xl, revised edition of whole in Budé edition, 1990, and of ix-xxxii printed in R. Sorabji, ed. *Aristotle Transformed*, London & Ithaca, NY 1990.

(iii) Innovation, traditionalism, loyalty, plagiarism

It might be thought that the Neoplatonist doctrine of the harmony of Greek philosophers would stifle innovation, but the actual situation is the reverse. Like certain other restrictions (cf. Edward Grant on Bishop Tempier's theological restrictions of 1277 AD, in *Viator* 10, 1979, 211-44, repr. in *his Studies in Medieval Science and Natural Philosophy*) they stimulated the philosophical imagination.

Further, Simplicius' *Corollaries on Place and Time* in his *Physics Commentary* record all sorts of novelties. Proclus had a new idea of place, Asclepiodotus loved novelties, Damascius was the most original, although not on every topic, and even he was foreshadowed by Theophrastus. Some problems have only just been solved.

It was also all right violently to disagree with your predecessors in the school, as Iamblichus disagreed extensively with his probable teacher Porphyry and with Plotinus and as Damascius did with his illustrious predecessor Proclus. Indeed, the fragments of Damascius' *Philosophical History* newly edited by Polymnia Athanassiadi, show him being critical of many members of the school. Yet Damascius, unlike his pupil Simplicius, will never willingly disagree with the divine Iamblichus. As for disagreement with Plato or Aristotle, this is the wrong approach, for which Simplicius castigated Philoponus. One should instead be establishing their harmony, without, however, defending Aristotle as if one were a member of his school (see above under **2(a)(i)**).

As explained more fully in *Aristotle Transformed*, many, but not all, of the late Neoplatonist commentaries represent lecture courses. Plutarch of Athens, Syrianus and Ammonius welcomed the idea of their own lectures being published by their pupils. Sometimes, but only sometimes, the *mss.* alert us in these cases that the published version is 'from the voice of' the teacher, not the pupil. This is true for example of four of Philoponus' commentaries from the voice of Ammonius, although in three cases it is stated that Philoponus has added reflections of his own.

This publication, with the teacher's approval, of his lectures did not preclude charges of plagiarism in other cases. Plotinus was accused of plagiarising the Middle Platonist Numenius (Porphyry *Life of Plotinus* 17-18; 21), and Philoponus is accused of plagiarising the much earlier Aristotelian, Xenarchus (Simplicius *in Cael.* 42,17-20 = *Philoponus Against Aristotle on the Eternity of the World* fr. 18 Wildberg).

(12) Simplicius *Corollaries on Place and Time, in Phys.* 795,11-17

Practically all of Proclus' successors right up to our time have followed him not only on this point but in all other matters as well. I except Asclepiodo-

tus, the best of Proclus' pupils, and our Damascius, of whom the former, because of his extreme cleverness, rejoiced in novel doctrines, while Damascius, through industry [reading *philoponia*, but the *mss. philophonia*, love of murder, has a certain poetic truth concerning his relation to Proclus] and his sympathy with Iamblichus, did not hesitate to attack many of Proclus' doctrines. JOU

(13) Simplicius *Corollaries on Place and Time, in Phys.* 795,31-5

The dissolution of these difficulties is particularly worth taking seriously because Aristotle himself, when at the end of his discussion of place he resolved the difficulties that he raised at the beginning of it, left these unresolved. Of his subsequent expositors, none, I think, has given the solutions, not even the most industrious of his expositors, Alexander of Aphrodisias. JOU

(14) Simplicius *Corollaries on Place and Time, in Phys.* 611,8-13

It will be demonstrated later how the divine Aristotle well discovered that to which he gave attention, even if he did not encompass all the things meant by place, through being the first to investigate it. After Aristotle's theory, let us set out, if we may, that theory which was propounded with great originality by Proclus, the Lycian philosopher, who was the teacher of our teachers. Of all of whom we know, he was the only one who elected to say that place is a body. JOU

(15) Simplicius *Corollaries on Place and Time, in Phys.* 624,37-625,3

Since, in addition to the theories of place discussed above, Damascius, the philosopher from Damascus, a man devoted to research who introduced many philosophical labours, articulated another theory, we should expound it also. We shall of necessity need a longer discussion on account of the novelty of his theory, which seeks to discover the essence of place from the purpose it serves. JOU

(16) Simplicius *Corollaries on Place and Time, in Phys.* 639,10-14

Now that I have set out this concept of place so far as I am able, and now that I have set out the difficulties raised against it and have supplied the solutions of the difficulties, I wish to show that the concept is neither entirely novel nor unknown to famous philosophers. Thus, Theophrastus appears to have held this position in his *Physics*. JOU

(17) Simplicius *Corollaries on Place and Time, in Phys.* 644,10-13

Let me add this to what has been said. Our colleague Damascius was the

first person we know to have grasped well place as good ordering, and analysed it. But he did not include in his purview the other things meant by place, either those regarding the incorporeal or those regarding the corporeal. JOU

(18) Damascius *On First Principles* vol. 3, 119,6-11 Westerink-Combès

And if I should have introduced any innovation concerning these things, I would have dishonoured the divine Iamblichus, this man who was the finest interpreter of divine matters and of intelligible ones in particular. Therefore, following in the intellectual footsteps of the one who had thought about so many things, it seems right to me at least to propose that the intelligible world is ... MR

(19) Philoponus *contra Aristotelem ap.* Simplicium *in Cael.* 42,17-20 fr. 18 Wildberg

But he [Philoponus], our young crow – a jackdaw rather – who 'chatters in vain against the sacred bird of Zeus', in the words of the magniloquent Pindar, sneakily (*parekduomenos*) plagiarises (*hupoballesthai*) the third objection of Xenarchus and adduces it as a first objection against what has been said by Aristotle in the present passage. CW

(20) Marinus *Life of Proclus* ch. 12, lines 295-300, ch. 13, lines 318-31 Masullo (= chs 12-13, pp. 15-16 Saffrey-Luna)

[12] With [Plutarch of Athens], Proclus read the *De Anima* of Aristotle and the *Phaedo* of Plato. The great man [Plutarch], exploiting the growing ambition of the young man [Proclus], encouraged him also to write down his [Plutarch's] teachings, saying to him that by his completing these lecture notes himself, they will be called commentaries by Proclus on the *Phaedo*.

[13] In a period of not quite two years, Proclus read with Syrianus all of Aristotle's works – those on logic, ethics, politics and natural science, as well as that subject which is above all these, theology. When sufficiently inducted through these, as though from some sort of induction rituals or lesser mysteries, he was led by Syrianus to an initiation into the mystagogy of Plato, in its proper order and not – as the saying goes – 'stretching a foot over the threshold' (i.e. jumping) and enabled by him to see as an initiate the truly divine mysteries found in that man's [i.e. Plato's] works with the eyes of the soul unpolluted and the contemplative faculty of the mind undefiled.

And applying himself day and night with unsleeping self-discipline and attention, he wrote a synoptic account of [Syrianus'] teachings, which displayed his astute judgement. He produced so much in such a short time that by the time he reached the age of 28, he had written, besides many

other works, a really polished set of lectures, brimming with knowledge, on the *Timaeus*. MR

Reading

Polymnia Athanassiadi, *Damascius, Philosophical History*, Oxbow Books, Oxford 1999.

Philippe Hoffmann, 'Simplicius' polemics', in Richard Sorabji, ed., *Philoponus and the Rejection of Aristotelian Science*, London & Ithaca, NY 1987.

M. Richard, *'Apo Phônês'*, *Byzantion* **20, 1950, 191-222. An unpublished English** translation of the French by Victor Caston is in the library of the Institute of Classical Studies, University of London.

(iv) Decisions on authenticity of texts

Immisch considers that discussions of authenticity of Aristotle's works may go back to Demetrius of Phalerum and other Aristotelians who helped Ptolemy Philadelphus establish his library in Alexandria in the third century BC. We shall see under **2(b)(iv)** that the obscurity of Aristotle's style was a subject of systematic discussion. It was also invoked as evidence of the authenticity of the *Meteorology* and *On Interpretation*.

(21) Olympiodorus *in Meteor.* 4,16-18

Some people have condemned the first book [of the *Meteorologica*] as spurious, in the first place on the grounds that it goes beyond Aristotle himself and practises clarity (*saphêneia*). Against them, I shall maintain that there is a great deal of unclarity (*asapheia*) in the book. RRKS

Under **7(a)** below and here Andronicus rejects the authenticity of *On Interpretation*. His reason and Alexander's replies reveal the kind of criteria considered relevant. (For another useful discussion of authenticity, in this case of the *Categories*, see Olympiodorus *Prolegomena* 22,38-24,20.)

(22) Boethius *in Int.*[2], 11,13-13,11 Meiser

For Andronicus thinks this book is not by Aristotle; whereas Alexander rightly and forcefully proves him wrong. Although antiquity has judged Andronicus to be an accurate and painstaking critic and discoverer of Aristotle's works, it really is amazing why he is wrong in his assessment of this work. For he tries to prove it is not by Aristotle from the fact that Aristotle deals at the beginning of the book with the thoughts of the mind, calling them affections (*passiones*) of the soul, and that he recalls then that he had discussed this issue more fully in *On the Soul*. Now because people used to call sadness, joy, desire and other similar effects (*adfectiones*) affections (*passiones*) of the soul, Andronicus says that the proof of non-Aristotelian authorship is precisely that Aristotle did not deal at all in *On the Soul* with effects of this kind. But Andronicus does not understand that in

the present work Aristotle does not mean by 'affections (*passiones)* of the soul' effects but thoughts.

[11,30] Alexander added to this many other arguments as to why he thought this work was certainly by Aristotle. For example: what is said here agrees with Aristotle's views elsewhere on the statement-making sentence (*enuntiatio*); [12] the style which is compressed through terseness is not at odds with Aristotle's [normal] obscurity (*obscuritas*); also Theophrastus, as usual when he deals with topics similar to those already treated by Aristotle, uses also in his work *On Affirmation and Negation* some of the same terms as Aristotle used in this work [*On Interpretation*]. Theophrastus also provides the following indication of Aristotle's authorship: whenever he deals with a topic after his teacher he touches only lightly upon what he recognised had been [previously] said by Aristotle, but other matters not treated by Aristotle he pursues more thoroughly. He does the same here too, for he skips lightly over the points raised by Aristotle on the statement-making sentence, but subjects to a closer kind of examination what his teacher passed over in silence. Alexander also added the following reason: since Aristotle was keen to write on syllogisms he would never have been able to do this properly had he not made some mention of propositions (*propositio*). I think it is also clear to those who consider the matter closely, that this book is a preparation for the *Analytics*. For just as he discusses the simple proposition in this work [*On Interpretation*], so too in the *Analytics* he considers only simple syllogisms, so that the very factor of simplicity in syllogisms and propositions seems to point to nothing other than a continuous work by Aristotle.

[12,26] And so we are not to listen to Andronicus who strikes this book from the works of Aristotle because of the word 'affections'. For Aristotle called thoughts of the soul affections because the thoughts we are accustomed to express in words (*sermo*) and bring forth in speech (*oratio*) have originated in some purpose and advantage. For a particular purpose and advantage caused men who lived separately to gather together and to want to be subject to laws and to found cities. [13] For this reason what arises from some advantage must also come of necessity from affection (*passio*) as well. For since divine things are without any affection, no external advantage can be added to them; but things which can be affected (*passibilia*) always find some purpose and advantage to support themselves. And so thoughts of the kind to be expressed to someone else in speech are rightly called 'affections' of the mind because they appear to have been put together for some purpose and advantage. Enough has now been said about the purpose, title and the fact that this work is indubitably by Aristotle. AS

Reading

O. Immisch, '*Attikoi Exêgêtai*', *Philologus* n.f. 17, 1904, 31-40.

P. Moraux, 'La critique d'authenticité chez les commentateurs grecs d'Aristote', in *Mélanges Mansel*, Ankara 1974, 265-88.

C.W. Müller, 'Die neuplatonischen Aristoteles kommentatoren über die Ursachen der Pseudepigraphie', *Rheinisches Museum für Philologie* 112, 1969, 120-6.

(v) Relevance of dramatis personae to interpretation

In Plato's dialogues, should the interpretation depend on who is speaking to whom? This was a typical view, and Porphyry's commentaries on Homer have a technical term for solving a question of interpretation by reference to the person being described, *luesthai ek tou prosôpou* (thanks to Ineke Sluiter for the reference). But Sedley points out that, although a literal interpretation of Socrates was often ruled out, on the grounds that he was addressing his particular interlocutor with irony, the Emperor Julian protests that this is bad methodology. One should just scrutinise what is said, not who is addressed.

(23) Julian *Against the Cynic Heracleius* 24

It is in any case a flawed method to scrutinise not what is being said but who the people are who are saying it, and whom their arguments are addressed to. DNS

Reading

David Sedley, 'Platonist commentary and the uniqueness of Socrates', in Peter Adamson, Han Baltussen, Martin Stone, eds, *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries, Bulletin of the Institute of Classical Studies*, suppl. vol., forthcoming 2004.

(vi) Impossible thought experiments

Impossible thought experiments were used (see Christopher Martin) not only to reduce things to absurdity, but also to investigate the nature of things, as Aristotle's pupil, Eudemus, already points out, calling the experimental situation a *hypothesis*, a usage followed also by Themistius, Philoponus and Simplicius. An influential example was Aristotle's experiment of mentally stripping all qualities and quantities off a body, in order to uncover the idea of its first matter, *Metaphysics* 7.3; *Physics* 4.2 and 8.

The impossibility of matter existing without form is a very strong one, but Alexander jibs at hypothesising a much weaker impossibility. To establish an infinite universe, the Pythagorean Archytas, followed by the Stoics, imagined the impossible feat of a human entering the region of celestial matter, to see if he could stick his hand out beyond the furthest star. Alexander warns that imagination is not a good guide to such an experiment being even theoretically possible, since we imagine all sorts of impossibilities. But Simplicius replies that many such impossibilities are imagined by Plato and Aristotle.

Care has to be taken not to imagine what you want to prove to be possible. When Galen argues for three-dimensional space being distinct from the volume of a body by imagining what would happen if the contents of a bronze jar shrank without any matter coming to fill the gap, Themistius rebukes him for assuming the distinctness he sought to prove. But Philoponus replies that Galen has only hypothesised that no matter fills the gap.

(24) Boethius *On Hypothetical Syllogisms* 1.2.5-6, *PL* 64, 833Dff.

Because we are speaking about hypothetical [syllogisms], we should first say what 'hypothesis' means. For the word 'hypothesis', from which 'hypo-

thetical syllogism' was taken, is used according to Eudemus in two ways: either something is assented to by means of a certain condition [i.e. agreement] of those agreeing among themselves, that may in no way come about, in order that reason may be pursued to its limit; or a consequence in a posited condition is shown by the force of conjunction or disjunction. And of the first [kind] of proposition an example is, for instance, when we demonstrate that all corporeal beings susbsist in the coming together of matter and form. For then we posit what can by the nature of things in no way come about; that is, if not in fact, then at least in thought, we separate everything having the nature of a form from subject matter. And because nothing of the corporeal things remains, we reckon to be demonstrated and shown that with these same coming together, the substance of corporeal things is constituted, with which separated and disjoined it is destroyed. In this example, therefore, with the condition to be agreed on posited, in order that for a little while that be understood to come about which can in no way come about, that is that form be separated from matter, we attend to what would follow, that is that bodies would perish, in order to confirm that these same [corporeal substances] consist of [matter and form]. For because the destruction of corporeal things follows, we rightly say that all corporeal things consist of matter and form. CJM

(25) Philoponus *in Phys.* 574,20-575,20 (Corollaries)

Let no one say that the hypothesis is impossible. (It was not a conclusion from my argument. When something impossible follows from a hypothesis, from the impossibility of what follows we reject the hypothesis). For we often make impossible hypotheses in order to consider the nature of things in themselves. Aristotle himself, objecting to those who claim that the earth stands unmoved because of the rapid rotation of the heavens, says, 'if we stop the heavens in thought, where will it move to?'. And again in turn, he studies bodies in and of themselves by separating them from all quality and all form; and we arrive at a conception of matter by separating all form from it and studying it naked all by itself.

[575,2] It is not absurd to use hypotheses, even if they are impossible, for the examination of other things. On this ground, since some people explained the stationary position of the earth by the motion of the heaven, Aristotle says that we should stop the heaven in thought, and ask where the earth would go by nature, so as to see whether the movement of the heavens is really the cause of the stationary position of the earth. Plato too separating by cogitation the cause of the order of the universe from the cosmos, asks how the universe would be, all by itself and without God [cf Aristotle *On the Heavens* 279b32-280a10]. Each of these cannot possibly come about; all the same, thought separates by cogitation things naturally conjoined, so as to see how each thing is by itself in its own nature. CJM

(26) Philoponus *in Phys.* 576,12-577,1 (Corollaries)

Themistius was wrong to object to Galen: the latter postulated hypothetically that no other body flowed in when the water in the jar was removed, in order to study the consequence, and [Themistius] objected that he was begging the question. [Themistius] says [*in Phys.* 114,7-12], 'But let us suppose that no other body flowed in when the water was removed, so there remains a separate extension inside the surface [sc. the inner surface of the walls of the jar]. But the hypothesis is irrational, my wise and clever Galen: it hypothesises the very thing we are inquiring about. We inquire whether there can be a separated extension – and you say, "let us suppose there is a separated extension". So you invent your own extension and draw it just as you want, but you don't demonstrate what is really there.'

[576,21] So says Themistius; but I believe it is obvious to everyone that his answer is silly. If it was agreed that the extension exists, but one asked whether it can exist by itself empty of body, as Aristotle does ask in the following passage [*Physics* 4.7, 214b16ff.], and then Galen hypothesised that when the water flows out, no other body enters instead, he was indeed begging the question. But since that is not the question now, but whether there is any extension at all, distinct from body-extension, which is the place of bodies, and Galen claims that when the water has departed no other body enters, he does not say, as you claim, Themistius, 'let there be an extension separate from the bodies inside the jar', but 'let no other body enter when the water runs out, and so let us see whether there is anything inside or not'. DJF

(27) Alexander *in Cael.* ap Simplicium *in Cael.* 286,23-7

Alexander also attacks those who consider what has been said to be true following the imaginary case of the hand. 'For', he says, 'we imagine many impossible things; and each person may imagine himself outside the town, and many times his size, or much smaller and the size of a millet seed'. RJH

(28) Simplicius *in Cael.* 285,5-21, quoting Alexander *in Cael.*

[*Alexander*] 'No one would be able to extend their hand having arrived at the extremity of the heaven. Further, it is not at all possible [even] in relation to hypothesis for something to come to be there. For the divine body that moves in a circle is unaffectable and incapable of admitting anything of such a kind within itself'.

[*Simplicius*, 285,9] But this objection is perhaps not conclusive, since we often suppose impossibilities for the sake of the subsequent consequence of the argument. Plato indeed [*Timaeus* 63 B] supposed someone to be standing on the fire sphere where the fire exists in its purest nature, having his head inclined towards the earth, and having the ability to abstract some of

the fire and place it in the scales and drag the balance towards the air. And although this is impossible, he supposed it, in order to show that down and up, heavy and light, do not exist by nature at the sphere. Indeed, he concludes from the hypothesis that [*Timaeus* 63C] 'when two things are raised at the same time by a single force, the smaller necessarily yields more and the larger less to what constrains them by force, and the former is called heavy and downward-moving, and the smaller lighter and upward-moving'. And Aristotle in the fourth book [*On the Heavens* 4.3, 310b3-4] will suppose the earth to be transferred to the place of fire. RJH

Reading

Christopher Martin, 'Non-reductive arguments from impossible hypotheses in Boethius and Philoponus', *Oxford Studies in Ancient Philosophy* 17, 1999, 279-302.

2(b) Methodology of Plato and Aristotle

(i) Dialogues vs. plays

Why does Plato write dialogues with dramatic characters, when he objected to dramatic plays? Answer: the characters are subjected to examination.

(1) Olympiodorus *in Gorg.*, Prooemium 1, Westerink's edition, p. 1, lines 7-19

Note that a dialogue contains characters in conversation, and it is for this reason, because they have characters, that Plato's works are called dialogues. In his *Republic,* he criticises those who produce comedy and tragedy and banishes them, because tragedians encourage our inclination towards grief and comedians our inclination towards pleasure-seeking. So it is worth inquiring why he himself follows their practice and introduces characters. We reply that if we were following the constitution of Plato, those who introduced decadent discussion would actually have to be beaten with blows (*plêgai*). But since that is not the way we live, characters are introduced – not untested ones as in drama, but characters subject to scrutiny and chastisement. He criticises Gorgias, you see, and Polus, Callicles and Thrasymachus too, as shameless and never given to blushing, whereas he praises upright men who live a philosophic life. RJ, KL, HT

(ii) Proems of dialogues

What is the purpose of the dramatic proems to Plato's dialogues? (a) Porphyry: to draw moral lessons from the dramatic presentation of the characters. (b) Iamblichus: to teach lessons about the subject studied in the dialogue. Examples in Proclus *in Tim.* 1.16,6-12; 18,29-19,30; 24,12-24.

(2) Proclus *in Parm.* col. 658,33-659,15

But we have said more than was necessary on this point. Let us return to the project we have undertaken, with only this additional observation. The

ancient commentators have held varying opinions regarding the preludes to Plato's dialogues. Some have not condescended to examine them at all, saying that hearers who are genuinely interested in the doctrines must come with a previous knowledge of these preliminaries. Others do not take them as being irrelevant, but see their use as being for the presentation of moral attitudes (*kathêkonta*), and present their relevance to the central problems addressed in the dialogues on this basis. Others demand that the interpreter bring the matter of the prologue into relation with the nature of the dialogue's subject. We agree with the last group and shall begin by showing how the subject of the dialogue relates to the matter in the introduction. Not that we shall neglect the moral stances represented in the dialogue, but in studying any Platonic dialogue we must look especially at the matters that are its subject and see how the details of the prologue prefigure them. GM, JD

Reading

John Dillon, 'A case-study in commentary: the Neoplatonic exegesis of the *prooimia* of Plato's dialogues', in Glenn Most, ed., *Commentaries = Kommentare*, Göttingen 2000, 206-22.

David Sedley, 'The Stoic-Platonic debate on *kathêkonta*', in Katerina Ierodiakonou, ed., *Topics in Stoic Philosophy*, Oxford 1999, 128-52.

(iii) Myths

According to Olympiodorus and Proclus, Plato sometimes substitutes philosophical stories for the offensive myths of the poets, because his stories are inoffensive for the young. Nonetheless, properly understood, the myths can facilitate either moral virtue or, for a few, mystical experience. Simplicius suggests that after his proofs (*apodeixeis*), Plato expounds myths, as Aristotle appeals to traditional beliefs, in order to strengthen conviction (*pistis*) in what he has proved, *in Cael.* 370,1-16. For yet another Neoplatonist treatment of myths (*fabulae*), see Macrobius *Commentary on the Dream of Scipio* Book 1, 2.

(3) Olympiodorus *in Gorg.* Lecture 46,4-6 Westerink, 238,20-239,11

These remarks have been directed to answering the first question, how they came upon the idea of myths. Next we must discuss the difference between philosophical and poetic myths. We say that each of them has an advantage over the other and yet also a disadvantage. For example, poetic [myth] has the advantage that its content is such that even one who happens not to believe it nevertheless proceeds to a concealed truth. For what man with sense believes that Zeus wanted to lie with Hera on the very ground, without going into the chamber? So poetic myth has the advantage of saying the sort of things that do not allow us to stay with the surface meaning but makes us seek a concealed truth. Nor do they say such things about gods alone but also about heroes. For how could a soldier say to a king:

'You wine-sack, with a dog's eyes' [*Iliad* 1.125],

and how was it a hero shed tears for a girl's sake and did not embrace restraint? And Homer himself said that Anteia was raving like a whore, when he said:

'Divine Anteia, wife of Proetus, lusted madly for him' [*Iliad* 6.160], whereas he said of Bellerophon that he was wise, 'thinking noble thoughts'. How, then, could he who says these things now say the opposite about Achilles? Hence he means something else, and we must seek what is concealed. So they have an advantage in this respect – for they did not know that there would arise a degenerate human society that respects only what is apparent, and does not search at all for what is concealed in the depths of the myth. So poetic myth has an advantage in this respect, in that it says things that not even cursory hearing accepts, but proceeds to the concealed. It has the disadvantage, however, that it deceives youthful ears.

[46,5] That's why Plato expels Homer from his state because of such myths. He says that the young cannot listen properly to such myths, so they should not listen to them, not even to lead them as far as the 'underlying meaning', i.e. as far as allegorical interpretation. For they are not receptive of allegory, so they should not listen. For the young do not know how to judge what is and what is not [allegorical], and whatever they grasp is 'hard to cleanse'. So he recommends that they learn other myths.

[46,6] So much, then, for poetic myths; philosophic myths have the opposite feature, that even if one stays with the surface meaning, one is not harmed. They postulate punishments and rivers under the earth: even if we stay just with these, we will not be harmed. So they have this advantage, that even if we stay with the surface meaning, we are not harmed. But they have the disadvantage that since their surface meaning is not harmful, we often stay right there and do not seek the truth.

Myths differ in this way, then. These [philosophical myths] are also constructed so as not to transmit doctrines indiscriminately. For just as in temples the sacred objects and mysteries are behind screens, so that the unworthy do not see them indiscriminately, so here too myths are screens for doctrines, so that they are not uncovered and accessible to anyone who wants.

Besides, philosophical myths look to the three [cognitive] activities of the soul. For if our entire selves were minds alone, with no imaginative faculty, we would not need myths, since we would always deal with intelligibles. If on the other hand we were entirely without reason and lived in accordance with imagination and this was our only protection, it would be necessary for us to live all our life as if in a myth. But in fact we have intellect and opinion and imagination. Hence demonstrations are given for intellect – and Plato says that if you want to function in accordance with intellect, you have 'demonstrations entrapped in bonds of adamant', if in accordance with opinion, you have the evidence of persons of sound opinion, and if in accordance with imagination, you have myths that stimulate it, so that from all of them you are benefited. RJ, KL, HT

(4) Proclus *in Remp.* 1.81,11-27

We are reminded from what has been said that Socrates thought that there were two types of myth. I mean one is for education, the other for initiation; one provides for ethical virtue, the other for contact with the divine; the one can benefit the majority of us, the other is suited to very few; the one is common and familiar to people, the other is forbidden and inappropriate for those who lack the zeal to establish themselves entirely with the divine; the one is concomitant with the dispositions of the young, the other is scarcely revealed even with sacrifices and mystical tradition. Now if this is what Socrates teaches us, we will be bound to say that he agrees with Homer about the events which Homer narrates in the form of myth, and in fact rejects and refutes myth-making on the part of Homer only to the extent that it appears at odds with the dialogue's present hypothesis and its outline of the education of the young. RW

(5) Simplicius *in Cael.* 370,8-16

And now again after the demonstrations (*apodeixeis*) he adds the testimony of the ancient accounts of our forefathers, to strengthen conviction (*pistis*). He produces the arguments from received opinions before the demonstrations as being briefer and tauter accounts leading to the demonstrations, but he implants a suspicion of faulty reasoning and inability to demonstrate. By contrast, arguments of this sort after the demonstrations make conviction (*pistis*) derived from the demonstrations simultaneously more secure and more ingrained (*sumpathesteros*). And that is why Aristotle used [arguments of this sort] both before the demonstrations and after them, while Plato used to hand down myths after his demonstrations. RRKS

Reading

Anne Sheppard, *Studies on the 5th and 6th Essays of Proclus' Commentary on the Republic*, *Hypomnemata*, Göttingen 1980.

(iv) Obscurity

See also above **2(a)(iv)**. The commentators tackle the ancient question, 'Why does Aristotle write obscurely?' Ammonius says: 'To frighten away the uninitiated.'

(6) Ammonius *in Cat.* 7,7-14

Eighth, let us ask why on earth the philosopher is contented with obscure (*asaphês*) teaching. We reply that it is just as in the temples, where curtains are used for the purpose of preventing everyone, and especially the impure, from encountering things they are not worthy of meeting. So too Aristotle uses the obscurity of his philosophy as a veil, so that good

people may for that reason stretch their minds even more, whereas empty minds that are lost through carelessness will be put to flight by the obscurity when they encounter sentences like these. GMat & MC

Reading

H.J. Blumenthal, 'Pseudo-Elias and the *Isagoge* commentaries again', in *Rheinisches Museum für Philologie* 124, 1981, 188-92.

Michael Erler, '*Epitêdeuein asaphêneian*', *Cronache Ercolanesi* 21, 1991, 83-8.

I. Hadot, *Simplicius, Commentaire sur les Catégories*, fasc.1, Introduction, ch. 8, Leiden 1990, 113-22.

3. Categories

3(a) The attack on Aristotle's *Categories*

Aristotle's *Categories* recognises ten categories of things: substance, quantity, relative, quality, acting, being acted on, position or posture, when, where, having on (or wearing). C.M. Gillespie has plausibly suggested that these categories were arrived at by Aristotle's taking as an example of substance one of the students in his class and asking what could be predicated of that student. He has a certain quantity, being six foot tall, certain relations, such as being to the right of another student, certain qualities like being fair-skinned, and so on. On this view, the list of ten was arrived at conversationally and casually. But the Neoplatonist commentators took the list as a definitive guide to the whole of Aristotle's work. They therefore asked far more philosophical questions about it than we may be inclined to, questions about how it can serve as such a guide.

It is noteworthy that Aristotle's ten categories, like his four causes, or modes of explanation, are presented without argument. In each case, Aristotle is saying, 'see it like this'. It is one of the functions of a great philosopher to show us how to imagine things differently. The arguments come later, in discussing the advantages or disadvantages of the scheme, or defending it from attack. If we confined ourselves to studying the arguments of the philosophers, we should miss much that was important.

Aristotle's *Categories* was the battleground where his future role in the curriculum of the West was fought. The earliest commentaries from that of Andronicus in the first century BC had focused above all on the *Categories*. And the work had not only been defended, but also attacked (see Gottschalk), e.g. by the Stoics Cornutus and Athenodorus and with particular ferocity by the Platonists Lucius and Nicostratus, who wrote not commentaries, but simply attacks on the *Categories*. So Plotinus in the third century AD had plenty of ammunition to draw from if he wanted to attack Aristotle's *Categories*. And on the standard view, he did mount an attack which could well have been decisive. In *Enneads* 6.1 [42] Plotinus urges the inability of the *Categories* to represent the intelligible as well as the sensible world. What he seeks to put in place of the categories for describing the intelligible world in 6.2 [43] is the five great kinds of Plato's *Sophist*. But in 6.3 [44], Plotinus turns to describing the sensible world and after all concedes some role to four of Aristotle's ten categories, substance, quantity, quality and relative, and to a fifth of his own, change, but still with many criticisms and qualifications which extend throughout the tract, as he discusses these five categories one by one. I shall not in the narrative always repeat the number in square brackets, which gives Plotinus' chronological order of composition, where it would be unduly repetitive, as it would be for these three *Enneads* in Chapter 3.

On the standard view, Plotinus' disciple and editor, Porphyry, rescued Aristotle and made him central to the Western curriculum once and for all, with the *Categories* as the first work in the curriculum. In the seventeenth century, Jesuits still chose the *Categories* as the first work to be translated into Chinese, as being the basis of all further thought (Wardy).

This standard account needs a little qualification. First, Steven Strange has pointed out that Porphyry is able to extract some of his defence out of Plotinus'

critique. Frans de Haas provides an important illustration. He argues that in 6.1 [42], Plotinus decides that the Aristotelian categories of substance, quantity and so on do not possess the reality of genera, for the very Aristotelian reason that the various Aristotelian substances (for example) do not fall under a single definition, and cannot do so, given that some are prior to others. This critique of Aristotle follows Aristotelian lines. Moreover, Plotinus concludes that Aristotle's ten divisions, which receive from Aristotle not a definition, but a non-defining characterisation, should be seen as merely ten *katêgoriai*, and de Haas argues persuasively that *katêgoriai* are merely *names* for types of thing. This paves the way for Porphyry to say (*in Cat.* 58,3-6) that Aristotle's *Categories* is about *words*, insofar as they signify things.

But should we infer that Plotinus and Porphyry agree about Aristotle after all? And do they agree not only on the *Categories* being about words, but also on Aristotle's not intending to describe the real beings in the intelligible world of Platonic Forms? This has been argued on the basis of Plotinus 6.1 [42] 1 (28-30) and Porphyry *in Cat.* 91,14-27. But Plotinus and Porphyry do not seem to agree. Whereas the passage in Plotinus may even express disgust at Aristotle omitting what are most of all beings (*ta malista onta*), that in Porphyry explicitly offers it as a *defence* of Aristotle that words are applied first and foremost to perceptible entities. Moreover, Dexippus, who is influenced by Porphyry, offers it as an explicit reply to Plotinus that Aristotle's *Categories* is addressing beginners, *in Cat.* 40,14-25. Further, Plotinus does not seem content even with Aristotle's non-definitional characterisations of his ten categories, and accepts only four of the categories for describing the perceptible world.

Iamblichus offered a quite different defence of Aristotle with his 'intellective interpretation': the definitions of the different categories do after all apply, though in a different sense, to the intelligible world. The interpretations of Porphyry and Iamblichus both leave their mark in Dexippus' commentary on the *Categories*. Moreover, Dexippus' commentary and the most comprehensive commentary of all, that of Simplicius, take up Plotinus' specific objections in detail, along with those of others. This is one of the cases in which the commentators attended to Plotinus closely. As regards Plotinus' central complaint, that Aristotle's categories fail to describe the world of intelligibles and Platonic Forms, the replies of Porphyry, Iamblichus and Dexippus are given under the discussion of the first category in **3(d)** below.

The controversy of later commentators with Plotinus is not the only one, although it is extremely prominent. Also prominent are Iamblichus' comments. We see him extending his disagreement with Porphyry. Their dispute on religious matters is well known from Iamblichus' reply to Porphyry in *The Mysteries of the Egyptians*. Here, at 302,18-303,30, Iamblichus scolds Porphyry for one of his replies to Plotinus. Iamblichus' own comments, with which Simplicius does not always agree, sometimes take the form of straight commentary. But he also introduces the neo-Pythagorean treatise on categories by pseudo-Archytas, which he mistakenly takes to antedate and influence Aristotle, and he offers his own higher interpretation, on which more below.

With the whole of Simplicius' commentary on the *Categories* now published in translation, along with the commentary of Dexippus, as well as the surviving commentaries of Porphyry and Ammonius, it has now become easier to take in the ancient philosophical critique of Aristotle's *Categories*, a critique whose thoroughness is unmatched in the modern literature, although the best modern treatments are informed by it. Further light is likely to be thrown by the Latin commentary of Boethius, which is modelled on Greek commentaries, but we are awaiting the much needed new text from Monika Asztalos.

There is no doubt that Aristotle paid close attention to the right definition of his

first four categories, substance, quantity, quality, relative. But his account of the next ones breaks off after a few lines in ch. 9 of the *Categories*, and what survives is only the remarks of later commentators on these remaining categories. Moreover, these commentators were taken in by the lines interpolated at 11b10-16 which put into Aristotle's mouth a disclaimer saying the remaining categories require no further discussion. It is true Aristotle may have given them less attention, if Gillespie's hypothesis above is right. Certainly, the categories of *keisthai* (posture) and *ekhein* (having on, or wearing) might not have seemed of equal interest. Nonetheless, Aristotle clearly embarks on a close study of the categories of being an agent or patient before his text breaks off, and the later writers discuss these categories at length and the others.

Plotinus' treatment of topics in 6.1, though selective, largely follows the same order as Aristotle's text and consequently of Simplicius' subsequent commentary. He was very likely following the order of one or more earlier commentaries and critiques. The chief deviations from Simplicius' order concern the interpolation in *Categories* ch. 9, where commentators had a freer hand because no discussion by Aristotle survives. Plotinus takes the interpolator's reference to When and Where and treats it earlier and at some length, because he disagrees with Aristotle on the related topics of time and place. More trivially, he reverses the interpolator's reference to posture and having on. When it comes to his own concessions in 6.3, he adopts a different order for the four Aristotelian categories he allows, postponing relatives to last.

The replies recorded by Dexippus and Simplicius give us a chance to see how Plotinus fares against his fellow Neoplatonists. He has no equal among the Neoplatonists in the imaginativeness of his treatment of psychology. But on the more cut and dried subject of Aristotle's categories in application to the sensible world, some of the Neoplatonists are as sharp as he is. Simplicius' reports of what Plotinus said, even in the apparent quotations, do not always seem to represent Plotinus' connexion of thought accurately, at least in the version of Plotinus that we have. But it is nonetheless clear that sometimes Plotinus nods, for example, we shall see, in his grasp of Aristotle's distinction between *kinêsis* and *energeia*.

Simplicius gives a thumbnail sketch of the main commentators. He thinks the aggressive critique of Lucius and Nicostratus was philosophically fruitful. Plotinus is treated as the most substantial after these, but Porphyry, in his lost commentary on the *Categories*, addressed to Gedalius, went still further, offering a resolution of every problem that had been raised. Some of this is preserved in the commentaries of Dexippus and Iamblichus, the latter of whom is also fully described, before Simplicius explains his own aspirations.

Simplicius follows Iamblichus' misidentification of pseudo-Archytas' work as belonging to Plato's friend Archytas, and so pre-dating Aristotle.

(1) Simplicius *in Cat.* 1,8-3,17

Different authors have carried out studies of this book from different inspirations. Some, like the eloquent Themistius, and whoever else was like him, have been anxious only to alter the actual wording (*lexis*) for more clarity. Others strove concisely to unveil the work's conceptual content (*ennoia*) as well, but only those bare concepts which are set forth by Aristotle, as Porphyry has done in his commentary by questions and responses. Others, in addition to this, touched at least modestly upon specific inquiries (*zêtêmata*), as was the case with Alexander of Aphrodisias, Herminus, and other such men. In this latter group I also place

Maximus [of Ephesus], who, although a student of Aidesius [of Cappadocia], the student of Iamblichus, agreed with Alexander on almost every point in his *Commentary on the Categories*. Some commentators, however, also applied more profound considerations to the work, as did the admirable Boethus. Still others were content to write only problems (*aporiai*) against what is said: this is what Lucius has done, and after him Nicostratus, who appropriated Lucius' considerations. These two vied with each other in providing objections (*enstaseis*) to nearly everything said in the book, and they did not go about their task with discretion, but rather in a violent and shameless manner. Yet we must be grateful to them, too, both because the problems they put forward were, for the most part, [2] substantial, and because they have provided their successors with starting-points both for the resolution of the problems, and for the development of many other excellent theories.

[2,3] After these, then, it was the great Plotinus who applied the most substantial scrutiny to the book of the *Categories*, in three entire books entitled *On the Genera of Being*. After these men it was Porphyry, cause of all that is good in us, who composed – not without labour – a complete interpretation of the book, containing the resolution of all objections (*enstaseôn*), in seven books addressed to Gedalius. He also included in this work an account of many of the doctrines of the Stoics, in accordance with what their account had in common.

[2,9] After Porphyry, the divine Iamblichus also devoted a lengthy treatise to this book. For the most part, he followed Porphyry right down to the letter, but he picked out some things and articulated them in order to make them more clear. At the same time, he contracted the scholastic long-windedness Porphyry had used against the objections; and he applied his Intellective Theory everywhere, to almost all of the chapter-headings. In addition, he also added something else to his writing which was useful: for even before Aristotle, the Pythagorean Archytas, in the book he entitled *On the All*, had already divided the primary genera into ten, and had clearly explained, with the help of examples, their distinctive tokens (*gnôrismata*), and had indicated the order (*taxis*) they occupy with regard to one another, and the specific differences of each [genus] as well as their common and individual attributes.

[2,20] Iamblichus, then, brought in the writings of Archytas in the appropriate places, unfolding that which [in Archytas' writings] had been intellectively concentrated, and demonstrating Aristotle's agreement with them. If there happened to be anything discordant between them – there are few such instances – he also brought this to the attention of lovers of knowledge; nor did he leave the cause of the discord unexamined; rightly so, for it is obvious that Aristotle always intends to remain faithful to Archytas.

[2,25] Dexippus, the student of Iamblichus, also gave a concise interpretation of Aristotle's book, but he proposed mainly to resolve the problems (*aporiai*) raised by Plotinus, which he put forward in dialogue form. Dexippus, however, added virtually nothing to the considerations of Porphyry and Iamblichus.

[2,30] Since, then, there has been so much interest in the *Categories* on the part of the most illustrious philosophers, I should straight away appear ridiculous for having dared [3] to have written something myself as well, unless I were to show that the cause of my audacity was justifiable. Now, I have come across some of the aforementioned writings, and, following Iamblichus' considerations as carefully as possible, I made note of them, often even using the philosopher's very words.

[3,4] My goal (*skopos*) in making this copy was, in the first place, to obtain, through the act of writing, as accurate an understanding (*katanoêsis*) as possible of what had been said. At the same time, I wished to lower this man's lofty understanding (*nous*), inaccessible to the common people, so that it would be more clear and commensurate [with the common understanding]. Thirdly, I also wanted to reduce somewhat the immense multitude of variegated writings; not, as the most philosophical Syrianus did, to an absolute minimum, but insofar as was compatible with leaving out nothing necessary.

[3,10] If I, too, have been able to add something [to what has already been written on the *Categories*], then I owe a debt of thanks to these men for this, too, after the gods; for it was guided by them that I have added the occasional problem of some value, or some articulation of what has been said worthy of the discussion. Nevertheless, I advise my readers never to disdain the writings especially of Porphyry and Iamblichus in favour of these little scholia, but rather, if at all, to use them as an introduction and training for a clearer grasp of what those men have said. MCh

Reading

Two general studies are:

Tom Bole, *Plato and Aristotle in Agreement: The Neoplatonist Commentaries on Aristotle's Categories*, PhD diss., University of Texas at Austin 1993.

Christos Evangeliou, *Aristotle's Categories and Porphyry*, Leiden 1988.

See notes and introductions to the following, the first six being volumes in the series *Ancient Commentators on Aristotle*. See The Ancient Commentators on Aristotle translation series list at the back of this book for details:

Ammonius *On Aristotle's Categories*, tr. S.M. Cohen and G.B. Matthews.

Dexippus *On Aristotle's Categories*, tr. John Dillon.

Simplicius *On Aristotle's Categories*, 4 vols, tr. M. Chase, F. de Haas, B. Fleet, R. Gaskin.

Simplicius, *Commentaire sur les Catégories d'Aristote, chapîtres 2-4*, ed. I. Hadot, tr. Ph. Hoffmann, notes I. Hadot and C. Luna, fasc. 1 and 3, Leiden 1990.

Simplicius, *Commentaire sur les Catégories*, vol. 2, ed. I. Hadot, tr. Ph. Hoffman, notes C. Luna, Paris 2001.

See also:

K. Bärthelein, 'Zur Kategorienforschung in der Antike', in D. Kock, K. Bort, eds, *Kategorie und Kategorialität*, Wurzburg 1990, 13-48.

C.M. Gillespie, 'The Aristotelian Categories', *Classical Quarterly* 19, 1925, 75-84, repr. in Jonathan Barnes, Malcolm Schofield, Richard Sorabji, eds, *Articles on Aristotle*, vol. 3, 1979, ch. 1, 1-12.

Hans Gottschalk, 'The earliest Aristotelian commentators', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, ch. 3.

F. de Haas, Introduction to *Simplicius On Aristotle's Categories*, chs 5-6, translated

by F. de Haas and B. Fleet in the series *Ancient Commentators on Aristotle*, London & Ithaca, NY 2000.

Frans de Haas, 'Did Plotinus and Porphyry disagree on Aristotle's *Categories*?', *Phronesis* 46, 2001.

I. Hadot, ed., *Simplicius' Commentaire sur les Catégories*, Leiden 1990, fascicles 1, 3.

S. Strange, 'Plotinus, Porphyry, and the Neoplatonic interpretation of the *Categories*', *Aufstieg und Niedergang der römischen Welt*, 2.36.2, 1987, 954-74.

Robert Wardy, *Aristotle in China*, Cambridge, 2000.

K. Wurm, *Substanz und Qualität, Ein Beitrag zur Interpretation Plotinischen Traktate 6.1, 2 und 3*, Berlin 1973.

The ancient discussions inform, but are not explicated in, the excellent and concise treatment of the *Categories* by J.L. Ackrill, *Aristotle's Categories and De Interpretatione*, Oxford 1963.

3(b) Is Aristotle's *Categories* about words, concepts, or things?

We shall see shortly that, to defend Aristotle against Plotinus' charge that the *Categories* omit Platonic Forms and other intelligible realities, Porphyry claims it is only meant to be about words, *in Cat.* 91,8-27. But his full view is a compromise, and a compromise widely accepted by later Neoplatonists, on the question whether it is about words, concepts, or things. According to Porphyry, the *Categories* is about *words*, insofar as they *signify things*. (For extra references see Porphyry *in Cat.* 57,7-8; 91,19; Simplicius *in Cat.* 10,22-3, cited in the Introduction, and see also Simplicius *in Cat.* 68,32-71,2 at 69,7-12, in **5** below.) The reference in Porphyry *in Cat.* 58,3-6, quoted here, to the primary imposition of names is explained in Porphyry's surrounding lines, which are quoted below in **7(j)**.

(1) Porphyry *in Cat.* 58,3-6

The subject of this book is the primary imposition of expressions, which is used for communicating about things. For it concerns simple significant words insofar as they signify things. SS

Porphyry's talk here of signification was later fleshed out in terms of signification through concepts. This move, credited to Iamblichus by Olympiodorus *in Cat.* 28,25-8 and David (Elias) *in Cat.* 130,14-131,10, as Frans de Haas points out in work in preparation, makes it explicit that all three candidates (words, concepts and things) are involved. But Olympiodorus attaches more weight to being, i.e. to things, than to words in his treatment of relatives at *in Cat.* 112,36-113,6, translated below in **3(i)**.

Reading

Frans de Haas, *John Philoponus' New Definitions of Prime Matter*, Leiden 1997, 191-2.

Pierre Hadot, 'The harmony of Plotinus and Aristotle according to Porphyry', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, ch. 6, tr. by Victor Caston from the French in *Plotino e il Neoplatonismo in Oriente e in Occidente*, Accademia Lincei, Rome 1974, 31-47.

A.C. Lloyd, *Anatomy of Neoplatonism*, Oxford 1990, 39; 45; 50.

3(c) Why ten categories and why these ten?

Dexippus (*in Cat.* 30,36-34,24) and Simplicius both give us a summary of objections to the list of ten categories which ask, 'why ten?' and 'why these ten?'. Plotinus, in favouring five categories, was not the first, we learn, to try to cut the list down. The third head of Plato's Academy, Xenocrates, and the Aristotelian, Andronicus, were satisfied with two categories taken from Plato: in itself (*kath' hauto*) and relative (*pros ti*, Simplicius *in Cat.* 63,22-3). The Neopythagorean pseudo-Archytas merely added 'relative' (*pros ti*) after the names of a number of the ten categories, so we learn from another passage, Simplicius *in Cat.* 157,18-20. What we will find illustrated below is that for every category the suggestion was made by one critic or another that the category, or some of its main contents, could be reduced to the category of relative.

The Stoics also had a scheme which the Aristotelians saw as a rival scheme of four classifications (nowadays called categories), and indeed the terminology concerning their fourth category of relative is common to Aristotle and the Stoics. Plotinus attacks the Stoic scheme in 6.1.25-30.

Among those who wanted a longer list of categories, some did so because they thought of the categories as purely verbal or grammatical distinctions. We shall notice discussion of the *differentia* as an 11th category below under **3(w)**. The Middle Platonists Plutarch of Chaeroneia and Alcinous, on the other hand, not only stuck to the number ten, but even claimed that Plato recognised the ten categories, one citing *Timaeus* 37A-B, the other Plato's *Parmenides*.

(1) Simplicius *in Cat.* 62,24-66,31

Many others disputed it, denouncing right off the division into such a multitude; as Athenodorus in his book which, although it was entitled *Against Aristotle's Categories*, only examined the division into such a multitude.

[62,27] Both Cornutus, moreover, in the work he entitled *Against Athenodorus and Aristotle*, and the followers of Lucius and Nicostratus spoke out against the division, as they did against practically everything else.

[62,30] We ought, however, to take up the opposing arguments in definite terms, making a three-fold division of them. For some charge the division with being excessive, others criticise it as being deficient, and a third group is constituted by those who consider that some genera have been introduced in the place of others. There have also been some who raise several accusations at the same time: some [accuse Aristotle of] deficiency and excess simultaneously, whereas others add, in addition to these, [63] the [charge of] substituting one genus in place of another. In the case of each kind [of objection], let us now state some problems (*aporiai*) as well as the solutions to them, through which it is possible to grasp the general character of opposing arguments, so that we may not go to excessive length in setting them all forth.

[63,4] Those who accuse [Aristotle] of excess say that he was wrong to oppose 'acting' (*to poiein*) to 'being-acted-upon' (*to paskhein*). One common genus, they say, should have been determined for them both: that of 'being changed' (*to kineisthai*). In reply to them, it ought to be said that that which acts (*to poioun*), insofar as it acts, is not changed, but rather causes things to be changed while itself remaining unchanged. Among sensible things,

however, some agents are changed accidentally, because the two principles – that of 'acting' and that of 'being-acted-upon' – run together into one. Perhaps, however, in the case of 'acting' and 'being-acted-upon' we should have raised the problem why they are not subsumed under the relative (*ta pros ti*), for that which acts (*to poioun*) acts upon something which is affected (*to paskhon*), and that which is affected is affected by that which acts. The answer is that if we link things up in this way, they will indeed be subsumed under the Relative; but in respect of activity (*energeia*) and affection (*pathos*), which have a different nature, they produce other genera. After all, in the case of the other relatives as well, like 'father' and 'son', the same things, *qua* subsisting of themselves, are subsumed under Substance, but in accordance with their relationship (*skhesis*) [they are subsumed] under the relatives. Yet how can 'being-in-a-position' (*keisthai*) fail to be 'being affected' (*paskhein*)? How can 'having' (*ekhein*) not be 'acting'? The answer is that 'being-in-a-position' is no more an affection (*pathos*) than it is an activity (*energeia*), for 'being-in-a-position' is 'being seated', or 'standing'; they are received in the category not because they are affected (*kata to paskhein*) or because they act (*kata to poiein*), but because of their situation (*hidrusis*) within something other. Similarly, 'having' is assigned not in respect of 'doing' – for 'being armed' and 'being shod' are no less 'being affected' – but in respect of being girt (*perikeisthai*).

[63,21] Others raise the charge of superfluity in another way. The followers of Xenocrates and of Andronicus seem to include everything in [the opposition] 'by itself' (*kath' hauto*) and 'relative', so that, according to them, so large a multitude of genera is superfluous. Others make the division into 'substance' and 'accident'; these people too seem somehow to be saying the same thing as those just mentioned, who say that accidents are 'relative' as [being] always 'of' other things, and that substance is by itself. It should therefore be said in common to both groups that while striving after the smallest number of divisions for Aristotle, they have missed their mark, since they neglect the universal and the particular. What is more, although accidents are many genera, they reduce them to one genus of accidents, viz. the relatives.

[63,30] 'Why, however,' they say, 'are accidents "of another" (*allou*), although in the proper sense of the term, it is only relatives which are "of another"? If it is because they are "of something" in any old way, then even things which exist "by themselves" (*kath' hauta*) are "of another", for Socrates is "of Sophroniscus", and a field is "of" its owner. If we were thus to refer accidents, too, back to their substrate, [64] this is not surprising, since [accidents], taken by themselves, are a particular nature (*phusis idia*). According to this rationale, moreover, both matter and the substrate itself are relatives, but insofar as they are principles, they exist by themselves.' Such, then, is the classification made by the followers of Iamblichus and Porphyry.

[64,4] Perhaps, however, this being 'of another' and such a 'relative' as this pertain to the accident insofar as it is opposed to substance, which

exists by itself and of itself (*heautês*); for 'relative' is opposed to 'by itself', and 'of another' (*allou*) is opposed to 'of itself' (*heautou*).

[64,7] Aristotle too shows this by taking this division (*tomê*) into two; it is, moreover, perhaps correct to say that Aristotle did well to divide the many distinctive characteristics (*idiotêtes*) of the accident, without neglecting to include its being comprehended under one heading; so that he also divides things into substrate (*hupokeimenon*) and things attached to the substrate, as some have preferred and thus sets against the definite substrate the indefinite number of things attached to the substrate.

[64,13] Others, such as the followers of Nicostratus, declare that the division is deficient. 'Why,' they say, 'when Aristotle opposed "acting" and "being-acted-upon", did he not set "being had" (*to ekhesthai*) against "having"?' But those who say this should have noticed that 'being had' fell into the category of 'being-in-a-position', which had already been determined. For someone holds (*ekhei*) the shield, but the shield is being held (*ekhetai*) in his being girt in such-and-such a way. Thus it is a position (*thesis*).

[64,18] 'Why, however,' say the followers of Lucius, 'did he omit conjunctions, if they are also significant expressions (*lexeis*)? For they are certainly not meaningless'.

[The answer is] that <lacuna> nor is their meaning primary, but they co-signify (*sussêmainousin*), just as we are accustomed to write angled marks and curved strokes alongside. These signs signify something when they accompany things which are written, but by themselves they signify nothing. For conjunctions also co-signify when they are with the other parts of the sentence (*logou merê*); in this they are similar to glue. In the third place, conjunctions are not even elements of the sentence (*logou stoikheia*), but at best parts of speech (*lexeôs merê* [cf. **7(k)** below]), just as glue is not a part of paper. Thus they are not even said (*legontai*), but at best are merely uttered (*ekphônountai*). Moreover, it should be said that even if conjunctions do signify, and are agreed to be lexically significant, it is by virtue of syntax and combination that they signify. Here, however, the discussion is about things without combination.

[64,29] They also inquire about where articles (*arthra*) are to be placed, but the same reasoning applies to them as well. After all, these things [sc. articles] are like conjunctions which [65] additionally signify (*prossêmainontes*) gender – viz., masculine or feminine – in an indefinite way. For they do not indicate what a thing is (*ti estin*), and are therefore called by some 'indefinite' (*aorista*).

But what about negations, privations, and the various moods of verbs? In which [category] will they be placed?

[65,3] Aristotle himself gave the answer to this in his notebooks (*hupomnêmata*). After all, in the *Methodicals*, in the *Divisions*, and in another notebook entitled *On Lexical Matters* – which, even if some hold that it is not a genuine work of Aristotle's, at any rate comes from some member of his school – in these he sets forth his categories, and adds 'I mean these together with their cases (*ptôseis*)', or their moods; and he coordinated his

teaching about them with negations, privations, and indefinites. 'Going barefoot' is thus in the same category as 'wearing shoes'. In general, then, since negations and privations have their existence in the elimination of beings, it is reasonable that they should be referred back to those things in which states (*hexeis*) and affirmations are found.

[65,13] But 'What about the one,' they say, 'and the unit and the point? How can they not fall outside the categories? They are not, as one might think, quantified, for they are neither continuous – since they are without parts– nor are they discrete (*diôrismenon*). But it is fitting that everything quantified should be either continuous or discrete, and if discrete, then either odd or even.' The answer is, as Alexander also holds, that they will be placed among the Relative, both as principle of numbers and as measure. If, however, number is of two kinds – one incorporeal, the other corporeal – then, as Boethus would say, the unit will also be twofold: one which is substance (*ousia*), and is in intelligible number – Aristotle also thinks that this one exists – and one which is relative or quantified. Later, however, Boethus says that perhaps it is better to call it quantified, for as whiteness (*leukotês*) is to white (*to leukon*), so is the dyad to two. If, therefore, the former are both qualified, then the latter are also quantified.

[65,24] However, they contradict Alexander when he says that it is possible to posit the unit as a part of the quantified, and therefore counts it among the quantified: for number is the plurality (*plêthos*) composed of units. Thus, they say that [the unit] is the principle (*arkhê*) of number, but not a part of number. But everywhere [they say] the principle is different from that of which it is the principle, as also the point (*sêmeion*), which is the principle of extensions (*diastêmatôn*), would not be an extension. But if these things are both principle and relative – since it is by having their own peculiar nature that all relatives thereby also have 'being-relative-to-something' (*to pros ti einai*), as a father, although a man and a substance, is a relative [66] *qua* father – in the case of these things as well, it should have been said that although they are principles, they are also relatives, *qua* principles.

[66,2] Perhaps, then since 'principle' (*arkhê*) is of two kinds, the distributed (*suntetagmenê* [i.e. distributed among species or individuals]) and the transcendent, the distributed principle is in the same genus as the middle (*meson*) and the limit (*peras*). It might be that even the transcendent principle is in the same genus, for if the transcendent unit of number is also a contracted (*sunêirêmenos*) number, then the contracted and the discrete would be in the same genus. After all, since forms are contracted and differentiated (*diakekrimenos*), and the name indicates the contracted state, or as the Stoics say, the summarised state (*kephlaiôdes*), while the definition (*horismos*) [indicates] the differentiated state, then the name and the definition would be in the same genus. Matter and form, moreover, which are the principles of composite substance, are themselves substances, even if they were not taken up here.

[66,11] It is possible, I think, both to raise the same problems about the point as well, and to resolve them. The more famous exegetes, however, say

that it is better to leave the 'one' as having different senses among the ten categories, as is also the case with 'being' (*to on*); but of terms with different senses there is neither any determinate division, nor can they be subsumed under one genus.

[66,16] For their part, finally, the third group, those who accuse [Aristotle] of having made an exchange (*antallagê*), and say that some genera were taken up in the place of others, say that change (*kinêsis*) should be taken up instead of 'acting' and 'being-acted-upon' [for Plotinus see **3(o)** below]. For neither is it possible to reduce change to any other genus, nor is any other genus predicated of it essentially (*en tôi ti estin*). It cannot be reduced to 'acting', for many changes are in [the category of] 'being-acted-upon'; [nor can it be reduced] to 'being-acted-upon', for [in that case] where shall those changes which are [in the category] of 'acting' be placed?

[66,21] In answer to these objectors, it is to be said that the potential (*to dunamei*) and the actual (*to energeiai*) are observed in all the categories, as pertaining to them in different senses, and that is why they have not been placed determinately in any one of them. Change, however, which is a path from the potential to actuality (*entelekheia*), is observed differently in Substance, where it is generation or corruption; differently in Quantity, where it is called 'increase' (*auxêsis*) and 'diminution' (*meiôsis*); differently in Quality, where we name it 'qualitative change' (*alloiôsis*); differently in Place (*en tôi pou*); and differently in each category. How, then, is it possible for change to be one category, when it, too, exists in different senses? The same, moreover, must be said of that stability (*stasis*) which is the opposite of change: for if there existed some stability in the true sense, then it would be appropriate to search for it not among sensibles, but among the intelligibles. MCh

(2) Alcinous *Didaskalikos* 6.10, p. 159,43-4 Whittaker

And [Plato] indicated the ten categories in the *Parmenides* and elsewhere. RRKS

(3) Plutarch *On the Generation of the Soul in the Timaeus* 1023D-E

And not only do the souls of mortal beings have a faculty that cognises the sensible, but he [Plato] says that also the soul of this world, revolving upon itself, whenever it comes into contact with something of a dispersed nature or something of an indivisible nature, is moved throughout its whole self. It then tells whatever it may be that something is the same as or different from – in relation to what precisely and in what sense and in what manner it happens to be, or to be qualified by, either of these terms [i.e. sameness or difference]. It does so in respect of each among the things that come to be. As in these words he is simultaneously giving an illustration of the ten categories, he explains the matter [i.e. of the epistemic faculties of the soul] even more clearly in those that follow. JO

(4) Plotinus 6.3 [44] 3 (28-31) Henry-Schwyzer

Or with place and time left out, *in* place and *in* time are superfluous, so that there would be five [genera], if the first three [matter, form, compound] are taken as one. If the three do not reduce to one, there will be matter, form, composite, relative, quantity, quality, change. RRKS

3(d) Plotinus' attack and replies: substance

Plotinus has at least three kinds of complaint against Aristotle's category of substance. One major complaint is that there are too many candidates to create a unitary genus of substance (*ousia*), 6.1.1-3; 6.3.3-4. With a number of Aristotle's categories, he concedes there is enough unity to constitute a category (*katêgoria*) which Frans de Haas interprets as a *linguistic* category, but not, as Aristotle would wish, a genus, see e.g. 6.1.1 (16-18); 6.1.4 (50-5); 6.1.5 (22-6); 6.1.9 (30-9); 6.1.10 (40-2); 6.3.13 (9-23). How can we accommodate in a single genus matter, form and the compound of the two, or particular and universal substances? We shall see below that it was indeed an ongoing problem how, if at all, to accommodate matter in the scheme of categories and how to accommodate differentiae, which distinguish one species from another and which give to these substances some or all of their form.

Plotinus tries out a number of *idia*, i.e. non-definitional characteristics which might pick out all and only substances, 6.1.3 (12-23); 6.3.4-5 and 8. What about being a base and seat for everything else? Not belonging to something other? Being a subject? Not being *in* a subject? Or this plus not being predicated as of something other? Some of these candidates fare better than others, but mere *idia* cannot tell us what substance is (*ti esti*), its concept (*ennoia*) and nature (*phusis*), 6.1.2 (15-18); 6.1.3 (19-23); 6.3.6 (1-3), nor assure us that we have a single genus.

Plotinus' pupil, Porphyry, replies, *ap.* Simplicium *in Cat.* 78,4-79,1, that matter and form are subsumed by Aristotle under composite substance, because, being parts of that substance, they too are substance. He rejects Boethus' alternative that matter and composite, but not form, qualify as substance because they are not present in a subject whereas form is present in matter. He, or Simplicius on his behalf, *in Cat.* 78,26-31, demurs: form is *part* of the composite and so is not present in the relevant way at least in composite matter (see **3(y)** below).

Plotinus has a second complaint, which I shall consider in the next section, that the sensible substances discussed by Aristotle do not deserve the title of 'substance', for they are a conglomeration (*sumphorêsis*) of non-substances, viz. qualities and matter, while matter is only a shadow of a shadow.

Plotinus' third complaint, derived from Nicostratus according to Simplicius *in Cat.* 76,13-14, is that it is hard to accommodate the all-important substances of the intelligible world as well as the substances of the sensible world. For Neoplatonists, this was the most threatening critique of Aristotelian substance. One of the objections was that Aristotle himself denies that things can belong to a single genus if some are prior and some posterior, 6.1.1 (25-8). This objection applied to quantity, 6.1.4 (50-1); quality, 6.1.12 (44-5); and all categories, 6.1.12 (51-3).

Plotinus already hints at one of the later solutions, that of Iamblichus, when he says that the term 'substance' might be used in more than one way, with some uses being analogous to others, or derived from some single item (*aph' henos*), with the most proper (*kurios*) use being in application to the intelligible word. But he is worried, 6.1.3 (5-7), that we might finish up with everything stuffed into a single category because everything derives from (*apo*) substance.

Porphyry answers that Aristotle's *Categories* is not discussing intelligibles. It is not even directly about things, as Plotinus, according to Simplicius, supposed. It is about words which are applied primarily to things in the sensible world. Porphyry may also have made Dexippus' point that Aristotle intends the book for beginners.

Iamblichus, probably a pupil of Porphyry, added an 'intellective interpretation', which is further described in **3(f)** below, in connexion with the category of where. As explained by Iamblichus' pupil, Dexippus, his idea was that sensible substances do indeed depend on intelligible substances which are primary, but since the intelligible ones cannot be directly described, they are called 'substance' metaphorically and by analogy with sensible ones. The analogy is that the description given by Aristotle to those substances he considered primary among sensible substances also applies in some way to intelligible substances, viz. that they are neither said of, nor present in, any more fundamental subject. What Aristotle meant, *Cat.* 1a20-b9, about sensible substances like Socrates was that Socrates is not present in any subject as white is present in body, nor said of any subject in the way that human is said of Socrates. Iamblichus adds that intelligible substance is also like sensible in admitting opposites, but without needing the time differences that sensible substance needs for admitting them. Other commentators deny that substances at the intelligible level can be described in terms of being present or not present in a subject, Ammonius *in Cat.* 37,5-10; Philoponus from the voice of Ammonius *in Cat.* 52,9-17.

Simplicius *in Cat.* 69,12-14, envisages an opposite line of questioning to that of Plotinus, viz. that in naming universals we are naming only concepts (*noêmata*), not things. Simplicius may have in mind Alexander or the Stoic views of universals, discussed in **5(c)**, **(d)** and **(e)** below. Simplicius' rival view distinguishes between different kinds of common entity, only some of which are straightforwardly universal. Some are transcendent, some in sensible things, some mental, 69,19-71,2, translated in **5(c)** below. Only the last could be called concepts.

(1) Plotinus 6.1 [42] 1 (15)-2 (4)

So first we should take into consideration the proponents of the view that divides beings (*ta onta*) into ten. Should they be thought of as talking about ten genera which share the common name of Being, or ten categories? For they are quite right to say that Being does not have the same meaning in all ten.

It would be more appropriate to start with the following questions. Are the ten present in a similar manner in the Intelligible and in the Sensible World? And are all of them present in the Sensible World, while some of them are, and others not, present in the Intelligible World (for the reverse is clearly impossible) ? At this point we should ask which of the ten are present also in the Intelligible World, and whether beings in that world are to be subsumed under the same genus as those in this world, or whether Substance there has the same name but not the same nature as Substance here. If the latter is the case, then there are more than ten. But if they do have the same name and the same nature, then it is absurd that Substance should mean the same thing in the case of both primary and posterior beings; for there can be no common genus where there is prior and posterior.

But when they make their division they are not talking about intelligi-

bles; so they had no wish to divide all beings – in fact they have excluded the most real of beings.

[2] To resume then. Are they to be thought of as genera? And in what way is Substance a single genus – for we should certainly begin our enquiries with Substance? It has already been stated that it is impossible for Substance to be a single feature common to both the Intelligible and the Sensible Worlds. BF

(2) Plotinus 6.1 [42] 3 (1-7)

But should we call substance a single category, combining together intelligible substance, matter, form, and the composite of both? This would be as if one called the family of Heraclids a single thing not as something common to all but as deriving from a single ancestor. For that [i.e. intelligible] substance is primarily substance, the rest is substance secondarily and in a lesser way. FDH

But what prevents everything being a single category, since all the other things that are said to have being derive from substance? RRKS

(3) Plotinus 6.3 [44] 5 (1-3)

This should be understood with respect to the so-called substance here. If it applies to that [i.e. intelligible] substance in some sense too, perhaps then by analogy and in a different sense. FDH

(4) Plotinus 6.6 [34] 13 (28-33)

We predicate Substance of each of the sensibles and also of the intelligibles, making the predication more strictly (*kuriôteron*) in the case of intelligibles; we use the terms 'more' and 'more strictly' in the case of things that exist, and say that there is being 'more' in the case of Substance (even sensible Substance) than in the other genera. BF

(5) Simplicius *in Cat.* 16,16-21

As for those who entitle the work [Aristotle's *Categories*] 'On the Genera of Being', or 'On the Ten Genera', as Plotinus seems to do in his refutation of them, they have regard only for the things (*pragmata*) and not for the concern with words (*logikos skopos*) – for the genera of being are the actual things. That the concern is not with beings but with the words (*phônai*) which signify them *qua* significant, has been stated previously. MCh

(6) Porphyry *in Cat.* 91,7-27

Since, however, the subject (*prothesis*) of this work is significant expressions (*lexeis*), and expressions are primarily applied to sensibles – for they

are what we first encounter in perception – Aristotle stated, appropriately to his subject matter, that these were the primary substances. As sensibles are the primary objects of signification, he posited individual substances as primary relative to significant expressions.

Q. What other objection would reasonably follow upon this one?

A. I reply that some object that on his own showing it is the intelligibles that are said most strictly and above all and primarily to be substances in the primary sense, i.e. the intelligible god and intellect and the Ideas, if there are Ideas, but he ignores these, and claims that the individuals in sensibles are primary substances.

Q. How will you solve this difficulty for him?

A. I shall say that since the subject of the work is significant expressions, and expressions are applied primarily to sensibles – for men first of all assign names to what they know and perceive, and only secondarily to those things that are primary by nature but secondary with respect to perception – it is reasonable for him to have called the things that are primarily signified by expressions, that is, sensibles and individuals, primary substances. Thus with respect to significant expressions sensible individuals are primary substances, but as regards nature, intelligible substances are primary. But his intention is to distinguish the genera of being according to the expressions that signify them, and these primarily signify individual sensible substances. SS

(7) Dexippus *in Cat.* 40,19-42,3

Dexippus: It is easy to reply to this, that these difficulties are being brought up irrelevantly. For it is not the purpose of this work to discuss (real) beings, nor the genera of primary substance; for it is aimed at young people who can follow only the simpler doctrines. So since his concern in the present instance is with expressions (*lexeis*) whose property it is to be said of substances, Plotinus is not justified in introducing into the study of these [sc. *lexeis*] questions of ontology.

However, I do not think that we should sidestep thus a course of argument well suited to the present occasion, but rather take our start from the philosophy of Plotinus itself and set the present course of argument in the context of his overall position. For he postulates one single genus of substance in the intelligible realm as being a common source of being to the incorporeal forms and thus bestowing being on the whole sensible realm and on the forms in matter. But if this is the case, and the first principle of substance extends the same through all, having a primary, secondary and tertiary level, in accordance with which it provides being to [41] some primarily and to others in another mode – so, if everything relates back to it as dependent on it, then the sketchy account (*hupographê*) presented here can be seen as indicating also the first principle from which this has fallen into this lowest manifestation.

[41,4] *Seleucus*: If Aristotle were proceeding on the same assumptions

as Plotinus, these statements might have some reasonableness; but as it is, you are presupposing the truth of Plotinus' hypotheses in your defence of Aristotle.

Dexippus: Well, now, in dealing with this problem, I will base myself on what is said in the *Metaphysics* [of Aristotle]. For there are two substances according to Aristotle, the intelligible and the sensible, and midway between those two the physical; the sensible [substance] is the composite (*sunthetos*), the physical that characterised by form and matter, and that which is higher than these is the intellective (*noeros*) and incorporeal, which he often calls unmoved but motive, as being the cause of motion which takes the form of life. For this is what Aristotle lays down about these substances in Book 12 of the *Metaphysics*, and here he subsumes the multiplicity of substances under Substance in general. He brought them all together into one system and traced them back to one originating principle (*arkhê*). For it will hardly be that anything else would participate in unity, if substance itself, which has its being in the one, is to be denied that completeness which is attributable to unity. So since intelligible reality is ineffable, he makes use of the name of 'substance' metaphorically and analogically from what is familiar to sense-perception. For all things that share a name share it in one of three ways; either in homonymous senses or synonymously, or one thing having the name primarily, the other metaphorically; in homonymous senses, as the foot of an instrument (*organon*) with respect to other feet of instruments; synonymously, as a knife is said to be 'sharper' than another knife or a sound than a sound – for a knife is not said to be sharper than a sound, as the sharpness is different in the two cases; primarily and metaphorically, as in the case of foot of ours and the feet of mountains. So, since (intelligibles) are ineffable, he uses the name 'substance' metaphorically (of them), making them knowable through things sensible and perceived by us. For sensible substance will be homonymous with [i.e. will not have the same definition as] intelligible substance, representing it only by analogy, but it will be synonymous with [i.e. will have the same definition as] physical substance, representing it by its very composition.

[41,30] Just as in the *Metaphysics* he [Aristotle, but *Metaph.* 13,2, 1077a31 calls a mathematical solid a body and a substance, without calling it incorporeal] refers to a certain incorporeal substance as 'body' – calling it incorporeal, since it proceeds from intellectual substance, but affirming that it is body, since it has already proceeded to the level of sensible substance – so in saying that this substance is synonymous [42] with physical substance, but homonymous with intelligible substance, he teaches us about those kinds by means of this kind. Above all (this is possible) because the description of this kind of substance, as that which is neither said of nor in a subject, can be applied to the other two also. JD

(8) Iamblichus *ap.* Simplicium *in Cat.* 116,25-33

Iamblichus points out this characteristic of substance in a more Pythago-

rean way by extending it by analogy to all substance. 'In intelligible substance', he says, 'movement and rest, samenesses and differences (*heterotêtes*) belong to substance simultaneously, and there the contrariety exists in substance not successively but simultaneously, and in its case 'receptivity' is spoken of in a different way from how it is viewed in composite substances. For, because extension (*diastasis) comes* to be, here the subject is one thing, and what comes to be in it another. But in the case of the most simple substance that in which it occurs and what occurs in it are not different (*allo*), nor does it occur in different things, but everything is a unity'. FDH

(9) Simplicius *in Cat.* 69,12-14

Concepts (*noêmata*) depend on things and vocal sound on concepts. So if anyone said that the vocal sound signifies only a concept in the case of universal kinds and all common items, he would not have noticed that he was presenting common items as less worthy than individuals. RRKS

Reading

Ricardo Chiaradonna, 'L'interpretazione della sostanza aristotelica in Porfirio', *Elenchos*, 1996, 55-94.

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P. Hadot, 'The harmony of Plotinus and Aristotle according to Porphyry', in Richard Sorabji, ed., *Aristotle Transformed: The Ancient Commentators and Their Influence*, London & Ithaca, NY 1990, ch. 6, translated by Victor Caston from the French in *Plotino e il Neoplatonismo in Oriente e in Occidente*, Accademia Lincei, Rome 1974.

A.C. Lloyd, 'Neoplatonist logic and Aristotelian logic', *Phronesis* 1, 1955-6, at 151.

3(e) Plotinus' denial of substancehood to sensible substances

Plotinus, as mentioned, rejects the sensible substances discussed by Aristotle as not deserving the title 'substance', but as being a conglomeration (*sumphorêsis*) of non-substances, viz. qualities and matter, while matter is only a shadow of a shadow, 6.3.8 (19-23; 30-7). There is more: for one thing, it will turn out below, under **3(m)** and **3(w)**, that qualities too are only shadows and traces, 2.6 [17] 1 (38-48); 2.6.2 (14-33); 2.6.3; 6.2 [43] 14 (14-22). Further, in our passage, 6.3.8 (27-30) Plotinus briefly questions whether there is a distinction between qualities which complete (*sumplêroun*) a substance by being part (*meros*) of it or of its essence and qualities which supervene on a substance already completed. If that distinction still holds, nonetheless the completers cannot be called substances: they too are only qualities. But in fact, although there is some distinction to be made, Plotinus turns out to regard this way of drawing it as entirely misconceived in the passages from 2.6 and 6.2 translated below in the two subsequent sections just mentioned.

3(e) Plotinus' denial of substancehood to sensible substances

(1) Plotinus 6.3 [44] 8 (19-37)

[(19-23)] But, then, is the sensible substance a conglomeration (*sumphorêsis*) of qualities and matter, and substance (a) all these solidified together upon a single matter, but each when taken separately either something qualified or something quantified, or (b) many qualified things? FDH

[(23-30)] Is it that one thing is a part of this substance and, if omitted, does not allow the reality (*hupostasis*) to become finished (*apêrtismenos*) yet, while another supervenes on the substance after it has come into being, and has its own rank (*taxis*), rather than disappearing from view in the mixture which makes up the so-called substance? I do not mean that when there with the other characteristics, it is a substance and completes (*sumplêroun*) a single volume of such and such size and quality, but that when elsewhere and not completing, it is a quality. Rather, I mean that not even there is each a substance, but it is the whole made up of all of them that is substance. RRKS

[(30-7)] Moreover, one must not object if we produce sensible substance from non-substances. For neither is the whole a veritable substance, but only something imitating the veritable substance which has being independently from everything else that depends on it and comes to be from it, because it truly *is*. Here what underlies is sterile and insufficient to be being, because the others do not come to be from it, but it is a shadow and a picture and seeming (*to phainesthai*) on what is itself a shadow. FDH

Dexippus replies to Plotinus that he alludes only to matter and neglects the role of form for Aristotle. Dexippus accepts the distinction between completing and accidental qualities, which Plotinus questions, and, following Porphyry, calls the former substantial (*ousiôdeis* also translated as essential) qualities.

(2) Dexippus *in Cat.* 59,9-35

Seleucus: Similarly, Plotinus raises the problem as to how, if sensible substance is never without size or quality, we are to separate off its accidents from it. Let us illustrate our meaning with an example: fire is said to be a substance; if we resolve to remove from it its dryness and its heat, the whole will no longer be substance, but a certain part of it; and this part is its matter, so that only matter will be found to be substance.

Dexippus: First of all, he does not reckon with the mixed and conglomerate nature of substance in this realm, but he separates off and contemplates its various properties on their own, whereas they do not to any degree subsist independently, but are all implicated with each other and have the capacity to constitute a thing at all only in conjunction with each other; and secondly (we would point out) that he separates off heat and dryness and the various differentiae which are constitutive of species

as if they were separable qualities, and he does not allow for specific substance, nor for the fact that the primary subsistence (*hupostasis*) of composite substance is from matter and form, as is shown in the *Physics*. For of those things which supervene on substance, the substantial (*ousiôdeis*) qualities complete it and help to constitute it, whereas the others supervene on it in a separable way. It is from these considerations that he proceeded to the notion that matter was substance in the truest sense according to Aristotle.

But that is not so; for he showed in the *Physics* that it is first and foremost form that is substance. Then again, not even the substantial qualities which subsist in union with it are separable, but preserve it potentially (for the conjunction of these constitutes the whole entity); but the matter nevertheless remains in a potential state, whether it receives the substantial qualities or the separable characteristics. So to regard sensible substance as being inseparable from size and quality is correct as far as it goes, but it does not yet have this absolute truth attached to it, that, even if we separate off the forms in thought, nevertheless Matter remains potentially (characterised by them) since it appears only in conjunction with forms, so that if Matter cannot even exist without the forms, then substance in the truer sense is that constituted by Form. JD

Reading

Tom Bole, *Plato and Aristotle in Agreement: The Neoplatonist Commentaries on Aristotle's Categories*, PhD diss, University of Texas at Austin 1993.

Ricardo Chiaradonna, 'L'interpretazione della sostanza aristotelica in Porfirio', *Elenchos* 1996, 55-94.

K. Wurm, *Substanz und Qualität*, Berlin 1973.

3(f) Iamblichus' intellective interpretation in further categories: where

Iamblichus, according to Simplicius *in Cat.* 2,13-14, gave an intellective (*noera*) interpretation not only for substance, but for nearly every topic in his (now lost) commentary on the *Categories*, and Simplicius quotes many of them (see further **3(p)** below for Iamblichus' intellective interpretation of Having on). In fact the intellective approach was wider still, since he adopts it towards matters of religion in *On the Mysteries of the Egyptians* 1.2. To give one more example from the *Categories*, place can be thought of as circumscribing what it contains, but not in an inert way, as Aristotle supposes. If we think of it as dynamically embracing, holding together what it contains, and shaping it, then we can see not only how there can be places for bodies, but also how the mind can be a place for ideas, and how there can be a place for Platonic Forms. 'Place' does not mean entirely different things, although the circumscribing differs, according to what is circumscribed.

Later Neoplatonists, talking not of Aristotle's categories but of certain other terms, suggested that they applied to Forms and to higher causes in a primary way, and to other things only derivatively (*pros hen* and *aph' henos*). For examples see Proclus *in Parm.* 880,3-11, translated in **5(b)**, and 'Simplicius' *in DA* 120,31-4, translated in **6(f)** below.

3(f) Iamblichus' intellective interpretation in further categories: where

It will be noticed that Simplicius, as usual, follows Iamblichus in the mistaken belief that the so-called Archytas preceded and influenced Aristotle's *Categories*.

(1) Simplicius *in Cat.* 2,9-25, translated under **3(a)** *Categories* above

(2) Iamblichus *ap.* Simplicium in *Cat.* 362,16-363,3

Following these points we ought to consider place in accordance with the [notion of] *containing* (*periekhein*) and in accordance with the whole genus of containment, and we ought to define the things in place in accordance with the [notion of] *being contained*. Now let no one think of the containment as a bare extension (*diastêma ... psilôs*): for not even the extension of the universe is inactive (*argon*), but it is filled up, in the case of forms with all manner of forms, in the case of living beings with all manner of living beings, in the case potentialities with all manner of potentialities, and similarly in the other cases. Thus one should think of place not only as containing and situating within itself the things that are in place, but also as sustaining (*anekhein*) them by a single power, for in this way place will not only contain bodies from without, but it will also fill them throughout their entirety with its uplifting (*anegeirein*) power. The bodies sustained by that [power], left to their own nature, would fall away, but once they are lifted up subject to the control of place they will exist in it in this manner.

[362,27] That is why the opinion of the many, which defines place to be the limit of the containing thing, insofar as it [i.e. that limit] has dimension, says that [the limit] is the extreme of the contained place and is what supervenes on the end as a [mere] accompaniment. But the opinion which in its reasoning embraces the limit in accordance with the very cause and origin [of things' being in place] does not speak of it as one of the accidents surrounding place, nor as one of the things which surround it [i.e. place] at the end, but conveys it [i.e. the limit, so understood] as its [i.e. place's] whole being and eldest cause.

[362,33] From these remarks one may easily gather how it is that the intellective soul is said to be a *place* for the rational principles (*logoi*) within it: for it is clear how it comprehends (*sullambanein*) within itself the many [rational principles] in a single rational principle and [under] a single head, not as some things [comprehended] within a *different* thing, but as some things [comprehended] within the *same* things [sc. as themselves]: here place is both living and rational (*logikos*). And in just the same way too the place for forms is [itself] a single form, inclusive of all forms. RG

(3) Simplicius *in Cat.* 363,29-364,22, reporting Iamblichus

Now Iamblichus says the following. 'Let us not, as the account [given by Archytas] suggests, apply these [marks of place] to the world alone, but let us rather always refer the limit quite generally back to the elder cause: for in this way the soul or mind, and the single and unified operation of this [mind], will be for us the limit of the whole world; and still higher up than

this [mind] we shall descry the essence (*ousia*) of place as of a god, being a thing of one form and conserving (*sunekhein*) everything within itself, and delimiting (*sumperainein*) the whole according to a single measure. And the same is to be concluded from the [nature of] containment (*periokhê*) too: for the principle (*aition*) of containment, ascending to the highest, draws us on to that divine place which is itself the cause of itself and is itself inclusive of itself, which subsists in itself and which has a subsistent reality that is no longer not separate from the things that are, but is indeed separate from them'. Let these, then, count as the doctrines of Iamblichus' intellective interpretation concerning place.

But we [Simplicius], investigating in a more balanced way the use and nature of place strictly and not metaphorically so called, say that since all ungenerated and indivisible things, on the one hand, possess their being and the continuation of their being in a unified way, they exist as wholes simultaneously in themselves, and for this reason do not need either place or time; but eternity suffices for them, making them all persist in unity. Things which are generated, on the other hand, and which possess both their very being and the continuation of their being divisibly – these things need time: [a time] which does not permit the continuation of their being to be dispersed or confounded, but rather as far as may be unites and connects it in an order according to before and after. Hence it is that the time of the Trojan War and of the present are not mixed together into the same one, and nor, on the other hand, are the parts [of time] altogether pulled apart from one another, but they maintain in [the right] order their continuity towards one another. In the same way, too, place on the one hand receives the parts of bodies – and thus these [parts] do not remain in a state of partlessness, but separate out into size and so fall away from their partlessness – and on the other hand organises, arranges and defines them, in order that the hands neither be mixed up with the feet, nor that they [i.e. hands and feet] be altogether pulled away from one another, because each occupies its appropriate place. RG

Reading

Richard Sorabji, *Matter, Space and Motion*, London & Ithaca, NY 1988, ch. 12: 'Is space inert or dynamic?'.

3(g) Plotinus' attack and replies: quantity

Aristotle included under quantity (*poson*) discrete entities (the whole numbers, the quantities of speech) and continuous ones (line, surface and body, place and time), *Cat.* ch. 6, 4b22-5. Plotinus suspects that Aristotle includes too much, especially 6.1.5 (20-6), if his quantity includes all the things that have quantity, and intelligibles which are prior to sensibles, 6.1.4 (50-1). What, moreover, do the discrete and continuous have in common, 6.1.4? And what about speech, time and place?

(a) *Continua.* Plotinus offers some analogies between the continuous and the discrete, 6.3.12 (12-14); cf. 6.3.13 (23-4). We can think of the unit or point progress-

ing and creating the discrete many or the continuous large, respectively, the further they progress. Simplicius *in Cat.* 127,14-16 and Dexippus 66,18-20 refer to 6.3.13 (1-3), where Plotinus speaks of discrete and continuous spaces as each having a boundary (*peras*), although discrete ones have distinct boundaries, whereas continuous ones share boundaries.

Simplicius prefers another answer, 133,11-34. He distinguishes mere extension (*diastasis, diastêma*) which carries no indication of size, from *megethos* (magnitude) which can be assigned an indeterminate size (large), a determinate size (one cubit), or up to three dimensions. The determinate or indeterminate sizes are extraneous to it, but it has to have so many dimensions, and so it qualifies as quantity.

Plotinus disagrees with Aristotle's claim, *Cat.* 5b11, that quantities have no contraries, and with his supporting claim that large and small, many and few, are not contraries, but relatives, since they involve a comparison. Though he reports the latter claim 6.1.4 (47-8), he decides that large and many are *not* relatives. Simplicius reports Iamblichus as objecting that in ordinary speech they often are, 145,19-29.

(b) *Speech.* Plotinus rejects the inclusion of speech under quantity, on the grounds that it is either the action of impacting air, or the impacted air itself, 6.1.5. But again Iamblichus disagrees: uttered sound involves an impact of a certain quantity, *ap.* Simplicium *in Cat.* 131,10-17. But Dexippus and Simplicius preserve a more interesting reply of Porphyry's. The metre of speech means that some uttered sounds are long and some short, and moreover this is not a function of time, because one can artificially protract the utterance of a short 'i', for example, over a long time, Dexippus *in Cat.* 70,17-31; Simplicius *in Cat.* 131,27-132,6.

(c) *Time and Place.* Aristotle, as remarked, included these under quantity, and Iamblichus defended this, arguing that since time is measured by the celestial clock, it must be akin to it, *ap.* Simplicium *in Cat.* 345,25-9. But Andronicus the Aristotelian and pseudo-Archytas the Neopythagorean made them into separate categories, *ap.* Simplicium *in Cat.* 134,5-7; 342,21-5; 347,6-7; 357,27-31.

Plotinus argues in 6.1.5 (19) that time is not a quantity (*ou gar dê posotês ho khronos*), any more than substance is. Admittedly, it may be measured, but that only means that, like substance, it can be assigned a quantity. Rather, 6.3.11 (6-10), time and place are better viewed as relatives, the one as measuring motion, the other as surrounding body.

(1) Plotinus 6.3 [44] 11 (6-10)

It has often been said that only these should be called quantities, while place and time have not been conceived as quantities. Rather time should be assigned to relative because it is the measure of motion, and place embraces body so that this too lies in relationship (*skhesis*) and relative (*pros ti*). RRKS

Simplicius comments in reply, *in Cat.* 343,12-14 that time is only incidentally connected with measure. If Plotinus accepts Plato's view that time is produced by soul as a moving image of eternity, he would do better to say that time is in his idiosyncratic category of change, or, if the relevant soul movements are substantial, in the category of substance, 343,18-344,7. In fact, Simplicius accepts Aristotle's allocation of time and place to quantity.

Elsewhere Simplicius is influenced by Iamblichus' dynamic view of place, de-

scribed above under **3(f)**. He then finds that place is hard to distinguish from form, *in Phys.* 638,26-7; cf. 629,13-19; 630,24-30. He also says that place is a substance. This view is explained in **Physics 13**.

(2) Simplicius *in Phys.* 623,18-20

But neither is place an accident; it too [i.e. like body which is in it] is substance, for it is not extension plain and simple, but extended space. FDH

Reading
On Simplicius:
Richard Sorabji, *Matter, Space and Motion*, London & Ithaca, NY 1988, ch. 12.

3(h) Plotinus' category of change, and replies

The Aristotelians and Iamblichus put change into the category of quantity, although Aristotle himself had not specified, merely telling us that change can occur *in respect* of any of the first four categories. Simplicius thinks it a quantity, and not merely because it is in time, which is an incidental fact, but in virtue of having extension (*diastasis*) and difference (*heterotês*), because of its distance from the One. There had, however, been many other views of how to classify change, which Simplicius records. Plotinus 6.1.17 (1-12); 6.3.21 (9-17), with Simplicius' approval, 308,29-310,7, rejects one suggestion, that change is a relative, because it belongs to a subject in a potential state. Plotinus in effect replies that change does not fit the second of Aristotle's two definitions of relative, which will be discussed below, because change has a nature and reality (*hupostasis*) of its own, so that its being does not consist solely of the relationship (*skhesis*) into which it enters.

Plotinus was unusual in making change (*kinêsis*) or activity (*energeia*) a separate category in its own right, 6.1.15 (12-16). That will be discussed further below under **3(o)**.

(1) Simplicius *in Cat.* 139,34-140,15

Much ambiguity seems to have arisen concerning change, since some say it is classified under the category of Relative, while others put it under several categories in which it can be considered (for change as increase and decrease belongs to Quantity, while as qualitative change (*alloiôsis*) it belongs to Quality – and as local movement it is different, as is substantial change); others, considering the potential and the actual in general in all the categories, say that change, being the perfect realisation of the thing changed *qua* thing changed, is common, according to Aristotle's account, to all ten categories. Others place it in the category of Action and Affection. Plotinus defined change *per se* as prior to active and passive as a separate category, but Iamblichus wants it to be quantity; he writes: 'For if being for change consists of extensions and if it has its analysis (*diexodos*) *per se* based on extension – it would be a quantity *per se* – since speech too is considered quantitatively because it is as long as it is as a result of

extensions of a particular size, and is measured by length of a particular size and is measurable.' It is not surprising that change is a quantity in respect of extension, but it is surprising that in respect of the change from potential to actual it can be considered in all the categories, and can be interpreted variously according to its various natures. BF

(2) Simplicius *in Cat.* 309,29-310,2

Some say that Aristotle did not posit a genus of change or activity (*energeia*) among the categories for the reason that these are placed under the relatives, because *activity* is *of* [i.e. relative to] what is potentially active (*energêtikos*), and change is *of* what is potentially changed. Plotinus replies nicely that: 'What generated the relatives was *relation* (*skhesis*) itself, not simply being *said in relation* to something else. For whenever there is some subsistent reality (*hupostasis*), even if it is *of* something else, and even if [it is said] *in relation to* something else, it has still received its nature before [receiving that of] the relative. Therefore even if this activity, change and state (*hexis*) are [each] *of* something else, they nevertheless do not forfeit being something prior to the relative, and being thought of *per se*.' RG

3(i) Aristotle's category of relatives and Cambridge change

Relatives, for Aristotle, are not relations, but things related. He offers two definitions. The second is designed to prevent substances and their parts from being relatives. In the *Categories*, Aristotle does not yet disqualify parts of substances, like a head, from being substances at 3a29-32, and when he gives his first definition, he allows wing and head to be relative to the winged and the headed, ch. 7, 6b36-7a22. But then he decides that substances may not be relatives, 8b15-21. This is in spite of the fact that he would not mind if a quality turned out also to be a relative, 11a37-8, which could happen easily on his first definition of relative, not so easily on his second. And it is also in spite of the fact that a man may be a slave and slave is relative, 7a31-b1. Slave meets the definitions of relative, but man does not.

Boethus, *ap.* Simplicium 188,3-6, reconciles the two treatments of head by saying that it is only *qua* part of a whole, not *qua* head, that Aristotle first described head as relative. Similarly Plotinus, 6.3.28 (5-8).

Olympiodorus *in Cat.* 112,19-113,15, reports that the first, unsatisfactory definition of relatives was Platonic, and that some Platonists tried in vain to defend it against Aristotle's superior second definition. Similarly, Elias (= David?) *in Cat.* 205,20-1.

The first definition of relative says: 'all those things are spoken of as relative which, whatever they themselves are, are said to be it "*of*" other things, or in some relation to another thing', 6a36-7. It is added that there must be reciprocity, in that each of the pair is similarly related to the other, as with master and slave, double and half, 6b28-7a18. This definition allows in head and headed.

The second definition requires that the very being of a relative should consist in the relation. It runs, 'those things are relative for which to be is the same as to be disposed relatively to something (*to pros ti pôs ekhein*)', 8a31-2. There is a corollary, 8a35-b15, that if one knows definitely that something is relative, then one also has

definite knowledge of the thing to which it is relatively disposed. This applies both to universals (8a24-8) and to particulars. For example (8b7-13), if one knows definitely that this particular is more beautiful, one must know the thing than which it is more beautiful definitely, and not merely as something less beautiful. This is said to rule out a head or hand being relative, 8b15-21.

There are some problems with this ruling out, one of them textual. The manuscripts at 8b18-19 say either 'it is not *possible* to know definitely to what it is that *this* particular (*hautê*) head or hand belongs' or, as David Sedley suggests, 'it is not possible to know definitely to what it is that head or hand *as such* (*autê*) belong', i.e. as universal subjects in their own right. The original would not have distinguished between *hautê* and *autê*. Another problem is that, on the face of it, it seems obviously false that this is something not possible to know, and John Ackrill had accordingly suggested emending the text from 'it is not possible' to 'it is not necessary'. But Sedley thinks the emendation is not needed, arguing that in the case of the universal head, the correlate 'headed' cannot supply knowledge that is definite.

There are further philosophical problems, however. First, head and hand should already have been ruled out as relatives, except in relation to the headed or handed, by the reciprocity requirement. For although a hand is the hand of a human or animal, a human or animal is not the human or animal of a hand. Secondly, it is not clear how the requirement of definite knowledge would succeed in ruling out head or hand. For it is Aristotle's much reiterated view (but had he not yet thought of it in the *Categories*?) that the parts of an organic body like head or flesh, are not head or flesh in the same sense when they are not performing their function in a living body, *GA* 726b22-4; 734b25-7; *Metaph.* 1035b16-17; b24-5; 1036b30-2; *DA* 412b20-5; *PA* 640b34-641a7; *Meteor.* 389b31-390b2; *Pol.* 1253a20-2; *GC* 321b28-32. How then could one know what a head is, without knowing definitely that it belongs to animals?

Aristotle's expression 'disposed relatively to something' (*pros ti pôs ekhon*) recurs at *EN* 1101b10-27; *Phys.* 246b3-20; *Top.* 142a26-31; 146a36-b4. But, as Sedley also points out, it is also ascribed by Simplicius *in Cat.* 217,8-32, to unidentified members of Plato's Academy, and he conjectures that these may have introduced the term even before Aristotle.

The term also came to be used by the Stoics for the fourth classification in what is nowadays called their scheme of categories. And Simplicius records *in Cat.* 166,15-29, that the relatively disposed (*pros ti pôs ekhon*) was distinguished from the merely relative (*pros ti*), by the fact that what is relatively disposed, for example something to the right, can start or stop being to the right, without undergoing any change in itself, merely through a change in the thing to the left. The name used nowadays for this phenomenon, 'Cambridge change', was introduced by Peter Geach (*God and the Soul*, London 1969, 71-2). But the concept has a long history. Already Plato in *Theaetetus* 154B-155D draws attention to two features of Cambridge change, the one already mentioned, that a thing can undergo Cambridge change, without changing in itself, and the related point that it does not have to undergo any process of becoming (*gignesthai*) in order to undergo Cambridge change.

Aristotle refers to Cambridge change repeatedly, but with a new emphasis, since he insists that a thing undergoing what we call 'Cambridge change' should not be thought of as changing at all, let alone undergoing change in itself, *Phys.* 200b33-201a9; 225b11-13 (= *Metaph.* 1068a11-13); 246b11-12; 247b4; *Metaph.* 1088a30-5. The point is readily suggested by Plato and firmly accepted by the Stoics, *ap.* Simplicium *in Cat.* 166,17-29; 172,1-5. But Simplicius disagrees, *in Cat.* 172,1-5; *in Phys.* 861,5-28, and cites Aristotle's successor, Theophrastus, as also having dis-

agreed, *in Cat.* 435,28-31; *in Phys.* 412,31-413,9; 860,19-861,4; 861,19-26. Theophrastus in addition raises a puzzle for Aristotle's definition of a thing's place in terms of its surroundings, that things which lost their surroundings would then lose their place 'without changing in themselves at all', Simplicius *in Phys.* 604,9-11. The reference to *loss* of place suggests a further thought about *change* of place, which Aristotle recognises as genuine change. Theophrastus would reduce both to mere Cambridge change, which Aristotle does not recognise as change at all.

Aristotle makes both points about relatives, both the point that a relative relation may start or stop without the subject changing, 225b11-13; 1088a30-5, and the point that there need be no process of a relation's coming into being, 1088a30-5. Plotinus, we shall see in the next section, also notes that relatives involve Cambridge change.

As remarked above under **3(c)**, the suggestion was very frequently made that an item assigned by Aristotle to one category should instead be relegated to the category of relative. The two commonest replies were either that the item proposed for relegation did not meet Aristotle's reciprocity requirement (not only is A an A of B, but also B is a B of A), or that it did not meet Aristotle's stricter definition of relative at 81a31ff. We have seen and will see that Plotinus raised a number of the cases of proposed relegation. Time and place are treated by Aristotle *Cat.* 4b22-5 as quantities, but Plotinus says they should instead be classed as relative, because time is defined by Aristotle as measuring motion, place as surrounding body, 6.3.11 (6-10), translated above under **3(g)**. Plotinus thinks that the boxer's ability to produce effects in something or someone else should also be classed under relative, rather than under quality, 6.1.12 (19-31). He raises the question whether his own category of change should be relegated to the relatives, because Aristotle defines change as belonging to something in a potential state, and the potential is related to the actual. But he replies, 6.1.17 (1-12), translated below under **3(o)**, that change does not meet the stricter definition of relative. Plotinus takes lying on (*anaklisis*) as an example of posture and relegates it to the relatives, 6.1.24 (10-12), and Simplicius raises it as a question whether posture and wearing should not be classed as relatives. But he replies that they meet neither of the two standard requirements, *in Cat.* 301,15-18; 339,24-35.

Aristotle's first definition:

(1) Aristotle *Cat.* 6a36-b8

The kind of things that are spoken of as relative are all those which are said to be just what they are 'of' other things, or in some other relation to another thing. For example, it is in comparison to something else that what is larger is spoken of as just what it is: it is spoken of as larger than something. And it is in relation to something else that what is double is spoken of as just what it is: it is spoken of as the double of something. Likewise everything else of this kind.

The following kinds of thing are also relative: state, disposition, perception, understanding, position. For all the items listed are said to be just what they are (and not anything else) 'of' other things. For a state is spoken of as the state of something, and understanding as understanding of something, and a position as the position of something, and likewise the others too.

So relatives are all the things which, are said to be just what they are 'of' other things, or in some other relation to another thing. DNS

Aristotle's second definition:

(2) Aristotle *Cat.* 8a13-b21

There is a problem whether, as seems to be the case, no substance is spoken of as relative, or whether this is possible with regard to some secondary substances.

With regard to primary substances it is true, since neither wholes nor their parts are spoken of as relative: some man is not spoken of as some man of something, nor some cow as some cow of something. The same applies to their parts. Some hand is not spoken of as some (*tis*) hand of something, but as something's hand, and some head is not spoken of as some head of something, but as something's head.

[8a21] So too for secondary substances, at any rate most of them. For example, man is not spoken of as man of something, nor cow as cow of something, nor wood as wood of something. Rather, it is the *possession* of something [or 'someone']. In cases like this, then, it is clear that they are not relative. However, in the case of some secondary substances it is more debatable. For example, head is spoken of as *something's* head, and hand as *something's* hand, and likewise for each thing of this kind. Hence these things would appear to be relative.

[8a28] If then the definition we have given of relatives is adequate, it will be extremely difficult if not impossible to achieve a solution according to which no substance is spoken of as relative. If, however, it is not adequate, but those things are relative for which to be is the same as to be disposed relatively to something (*pros ti pôs ekhein*), perhaps something could be said in reply. The former definition does apply to all relative things, yet this is not what their relativity is, to be spoken of as what they are of other things.

[8a35] This makes it clear that, if one knows definitely some relative thing, one will also know definitely the thing which it is spoken of as relative to. It is even intrinsically obvious. For if one knows, of some specific thing, that it is relative, and if, for those things which are relative, to be is the same as to be disposed relatively to something, one also knows the thing to which it is relatively disposed. For if one does not know in the slightest what the thing is relatively disposed to, one will not even know whether it is relatively disposed.

[8b3] This kind of thing is clear in individual cases too. For example, if one knows definitely that some specific thing is double, it directly follows that one also knows definitely of what it is double. If there is no definite thing of which one knows that it is double, one does not know in the slightest that it is double. Likewise if one knows that some specific thing is more beautiful, one must also, on account of this, know definitely what it is more beautiful than.

[8b9] One will not know indefinitely, that this thing is more beautiful than something inferior. For that sort of thing turns out to be belief, not knowledge; and one will not have certain knowledge that it is more beautiful than something inferior, since it might happen that there is nothing inferior to it.

Hence it is evident that, of necessity, whenever one knows definitely something relative, one also knows definitely the thing which it is spoken of as relative to.

[8b15] But as for head and hand, and each of the things of this kind which are substance, one can know definitely just what each thing itself is without its being necessary to know definitely what thing it is spoken of relatively to. For it is not (possible?) to know definitely to what it is that (this?) head or hand (in itself? [see narrative above]) belongs. So these things will not be relative. And if they are not relative, it will be true to say that no substance is relative. DNS

(3) Aristotle *Metaph.* 1088a29-35

A sign that the relative is least of all a substance with being is the fact that of it alone there is no process of coming into being or ceasing to be, nor a process of change, in the way that in respect of quantity there is growth and decay, in respect of quality qualitative change, in respect of place motion and in respect of substance coming and ceasing simply to exist. This does not happen with the relative, for without its changing, it will be now larger, now smaller or equal in size, according to how the other thing has changed in quantity. RRKS

(4) Aristotle *Phys.* 225b11-13

Nor is there change in respect of relatives. For it is possible that while one correlative changes, that other holds true or not without changing at all. Thus, change in respect of relatives is incidental. RRKS

(5) Olympiodorus *in Cat.* 112,9-113,15

It is possible to recognise something as a head without knowing whose head it is. This happens to us either in cases of similarity, as with a dove or pigeon, or in cases of concealment, as if we suppose that someone's whole body is concealed and only his head is exposed, or in cases of separation, as if someone displays the head separated from the rest of the body. If, then, relatives are recognised through each other, and of necessity someone who recognises one has knowledge of the rest, whereas it is possible to know head or hand without recognising whose they are, it is clear, then, <that> [head and hand] are not among the relatives. And if so, it is true to say that no substance is among the relatives.

[112,19] This [8a31-b21] is Aristotle's solution. But since the earlier

sketch of relatives [6a36-7], even if false, is Platonic, some people try to defend it and say that the Peripatetic sketch differs from the Platonic only in being clearer, and try to show that the difficulty [discussed above] gets no quarter, given the Platonic definition either.

[112,23] And they say that Aristotle takes the separated head, but this is a head in a different sense, since it does not perform the functions of a head. <And> on the other hand he takes the concealed head and the head of look-alike animals, but this head is not an individual (*atomon*), for we do not recognise it as an individual. For it is one of the things that make up a complete individual that we recognise [the head] as belonging to this particular, whereas we do not recognise it as belonging to this, so we do not recognise it as an individual. On the other hand, if it is in an indefinite way that we recognise that it is a head, it will also be in an indefinite way that we recognise what the head belongs to.

[112,30] Against this we say that it is not only in being clearer but also in being truer that the Peripatetic sketch differs from the Platonic. For first, the Platonic sketch defined one side of the relatives, without attending to the other side. For it says that [relatives are] said to be what they are *of* other things, <and> it said nothing about that in relation to which they are said [to be what they are]. The Peripatetic sketch, on the other hand, includes both correlatives, and says in respect of them that to be is the same as to be disposed relatively to something else.

[112,36] Secondly, the Platonic definition characterised relatives in terms of what is *said*, the Peripatetic in terms of what *is*. So the Peripatetic definition is more accurate than the Platonic to the extent that being is by nature closer to what is under discussion than being said.

[112,40] But the Platonists [*hoi apo Platônos*] say that Plato also makes mention of being, when he says 'all those which are said to be just what they *are* of other things.' However, they fail to notice that they make the difficulty in the definition greater, since after saying 'are', [Plato] did not stick with that, but moved over to 'are said' – wrongly, since the being of relatives resides not in being said, but rather in being in relation to something. So, therefore, the Peripatetic definition is more accurate than the Platonic.

[113,6] But those on the opposite side say that Aristotle himself is so much of the opinion that there is no difference between the sketch he gives and the Platonic one, that at the end of the [discussion of] the category [8b21-4] he says that perhaps it is hard to make statements about such things without having examined them in advance, but that it is not unprofitable to go through the difficulties about them. These [they say] are the words of someone who is undecided about what he says.

[113,11] But against this we say that these remarks are not addressed to what has just been said, but to the arguments by which he made the case that correlatives are not by nature mutually interdependent. He is showing that he was not so much speaking the truth as practising arguments when he included that there. That is the end of the lecture. RRKS

The Academics:

(6) Simplicius *in Cat.* 217,8-25

So it is better to have recourse to the hypothesis which produces the 'havables' (*hekta*) from being had, in the way that the Academics defined 'havable' by representing it as 'that which can be had', not accepting the definition on the basis of its etymology; for such a thing is discussed linguistically, not practically. So for the forms to be had indicates rather that they [are had] by what can have them. 'To have' is said in many senses (for we 'have' parts of the body as well as external things such as a field or a house), and they distinguished the havable from these as something additional, claiming that it is what can be had, in the way that wisdom is had by the wise man, walking by the walker, and sitting by the sitter.

[217,17] But since some considered them in terms of states (*hexeis*), others in terms of easily removable relations (*skheseis*), others in terms of changes disposed in a certain way relatively to something (*pros ti pôs ekhein*), they have called all these 'disposed in a certain way' (*pôs ekhein*) for the sake of clear exposition; and just as 'havable' is spoken of in a wider context than state, so they assumed that what is disposed in a certain way has a wider connotation than what is qualified. Some assumed just this much – that what is disposed in a certain way covers a wider field than what is qualified, in so far as that which is disposed in a certain way extends also to include that which is relatively disposed to something in a certain way, while that which is qualified comes to a halt at things that exist according to differentiation. Others offer a different treatment. BF

The Stoics:

(7) Simplicius *in Cat.* 166,15-29

Perhaps I should rephrase the argument more clearly. They [the Stoics] call relative (*pros ti*) such things as are conditioned (*diakeisthai*) [see Simpl. *in Cat.* 237,25-238,2, on meaning of *diathesis*, explained under **3(w)** below] in a certain way because of their own character but which are directed towards something else, while such things as have a nature to be, and to stop being, an accident of something without transformation (*metabolê*) and qualitative change in themselves, and [simply] with regard to something external, these things they say are disposed in a certain way relative to something (*pros ti pôs ekhein*). Consequently when something conditioned according to a differentia is directed towards something else, it will only be relative to something (*pros ti*), like state, knowledge and perception. But when it is considered not in terms of the inherent differentia, but purely in terms of its relationship (*skhesis*) to something else, it will be disposed in a certain way relative to something (*pros ti pôs ekhein*). For son and righthand need certain externals for their existence; that is why, although no change takes place within them, the father is no longer [a father] when his son dies, and [the person on the] righthand is not on the

righthand when the person next to him changes his place. But sweet and bitter would not be altered unless the potential within them is altered with them. So if they are not affected but do alter in terms of the relationship of something other to them, it is clear that things that are in a certain way disposed relative to something have their being only in relationship (*skhesis*) and not according to any differentia. BF

(8) Simplicius *in Cat.* 172,1-5

The Stoics are wrong to think that things that are relatively disposed to something (*pros ti pôs ekhein*) else in a certain way are free of any distinctive feature (*idiotês*) serving as a differentia because they by nature come and go with no change occurring in them; this is wrongly said, since even in things relative to something (*pros ti*) change occurs in the way that they naturally change. BF

Theophrastus, Eudemus and Simplicius:

(9) Simplicius *in Cat.* 435,26-31

I want to demonstrate that even Theophrastus, the best of Aristotle's pupils, concurs with my suppositions. For he speaks as follows in the first book of his *Physics*: 'It is not difficult to expound the common and general account of change and say that it is a certain incomplete activity (*energeia*) of what is potential *qua* such [i.e. *qua* potential] in respect of each genus of the categories.' RG

(10) Simplicius *in Phys.* 860,19-861,28

Theophrastus, however, in the first book of his *Physics* says that change can be observed in each genus of the categories and writes as follows: 'With regard to change, it is not difficult to expound the common and general account, and say that it is a certain incomplete activity (*energeia*) of what is potential *qua* such [i.e. *qua* potential] in respect of each genus of the categories.' Now he seems to call all transformation (*metabolê*) in common change (*kinêsis*). For also the definition which says that it [change] is the actualisation of the potential as such is not of movement in the strict sense but also of coming and ceasing to be and all transformation whatsoever. That is why a little further on Theophrastus says 'one must inquire about changes, whether some are comings to be and others like activities of a sort'. But it is very evident that there must always be transformation of substrates also in the relational categories according to their relations, if, indeed, the relations of existents are not everlasting in respect to these categories. So if existents are transformed as such, they must be transformed either through coming and ceasing to be or by change, since [861] these varieties of transformation are handed down by Aristotle by division. But we should not say that a man is coming to be when he puts on a ring

or is transformed with regard to some other state; so he must change through such transformations.

[861,5] But Eudemus said that transformations of condition (*diathesis* [see again Simpl. *in Cat.* 237,25ff.]) come about by another type of change and not the above. For even Aristotle himself, as he goes on, says that loss is contrary to gain and thinks it right to call these transformations, saying 'therefore coming to be is contrary to ceasing to be and loss to gain'. But these are transformations, not changes. But if somebody wishes that there should not be change at all in these categories, transformation must be divided no longer only into coming and ceasing to be and change, but another species must be added which fits with transformations in relation (*skhesis*), so that the transformation from not-substrate to substrate will be coming to be, that from substrate to not-substrate ceasing to be; but the remaining one from substrate to substrate must be divided into that with regard to condition, which Aristotle thinks fit to call change (*kinêsis*), and that with regard to relation (*skhesis*), which he refuses to call a change since it exhibits no difference in the substrate, but which he also calls transformation because there is no specific name for the kind. And I think it true to say that as he does not think fit to say that things which change in part change as such, but includes them with things that change incidentally, still more he should not say that those things change as such which are transformed with regard to relation and those that are so when other things change. But the inquiry was about things that change as such, so that even if Theophrastus says that there is change in all the categories, he spoke without making a distinction, having as yet distinguished neither change within transformation, nor what is as such from the incidental. JOU

(11) Simplicius *in Phys.* 412,31-413,9

I know that it seems rash to speak out contrarily to Aristotle, but, until we are able to recognize accurately the explanation of this sort of classification which he makes, we are sufficiently encouraged by the agreement of Eudemus quoted with regard to time, and still more by that of Theophrastus, who clearly views change and transformation as being in all the categories. At any rate he says in the second book of his *On Change* that 'it is more appropriate, as we say and as is the case, that the actuality of the potentially changeable *qua* changeable should reside in each of the other categories, such as substance, quality, quantity, travel. For qualitative change, growth, travel, coming to be and their opposites are so.' But in the third book he wrote as follows, still more clearly, as I think: 'In the delimitation of change we say that there are as many species of it as there are categories. For we say that change is the actualisation of what is potential as such.' JOU

(12) Theophrastus *ap.* Simplicium *in Phys.* 604,9-11

Things in a place will no longer be in a place if, without their changing themselves at all, their surroundings are removed. RRKS

Reading

F. Caujolle-Zaslavsky, 'Les relatifs dans les Catégories', in P. Aubenque, ed., *Concepts et catégories dans la pensée antique*, Paris 1980.

A. Conti, 'La teoria della relazione nei commentatori neoplatonici delle *Categorie* di Aristotele', *Rivista Critica di Storia Della Filosofia*, 38, 1983, 259-83.

Concetta Luna, 'La relation chez Simplicius', in I. Hadot, ed., *Simplicius, sa vie, son œuvre, sa survie*, Berlin & New York 1987.

Mario Mignucci, 'Aristotle's definitions of relatives in *Cat.* 7', *Phronesis* 31, 1986, 101-27.

David Sedley, 'Aristotelian relatives', *Mélanges for Jacques Brunschwig*, Paris 2000.

Richard Sorabji, *Matter, Space and Motion*, London & Ithaca, NY 1988, ch. 12, esp. 197-8.

3(j) Plotinus on the reality of relatives

Plotinus raises two major questions about relatives. First, 6.1.6, are they real (a *hupostasis*), or when we say two things are alike or equal, is there anything in the two things other than their qualities or quantities? What is the relation other than our judgement when we compare the qualities, or the quantities, and juxtapose them in our minds? Secondly, 6.1.8, if the different relations are very heterogeneous, how do they come together to form a single genus? It is still worse if one must accommodate , both double and double sized man, 6.1.9 (30-9).

In 6.1.7 (2-16) Plotinus replies to the first problem that the relation of equality is something additional to the quantity, and is there whether we notice it or not. He suggests that the impression to the contrary may be created by the fact that change in respect of relations can be merely (see preceding section) Cambridge change, although he thinks this to be so only in some cases, 6.1.7 (16-21).

Simplicius responds to the idea of the unreality of relatives with a paean to the importance of relation in the universe for knowledge, for causation and for our relation to God. Compare Iamblichus' eloquence about the category of Having on, under **3(p)**.

(1) Plotinus 6.1 [42] 7 (2-21)

But if we speak truly when we say, 'this time is before this and this one after', comparing two times and saying that the before is something other than the subjects which underlie, and similarly in the case of right and left, and with magnitudes when we say that their relationship by which one exceeds and the other is exceeded is something over and above their quantity; and if even without our speaking or thinking, things are such that this is double that and contains it, while the other is contained, even before we fix [attention] on (*ephistanai*) it, and things are equal to each other prior to us, and stand in a relation of sameness to each other, as regards their qualities; and if with all the things we describe as relative,

the relationship to each other comes after the subjects which underlie it, and we merely see the relationship in existence and our knowledge is directed to the thing known (and the fact of the reality (*hupostasis*) stemming from the relationship is consequently even more obvious than the thing known); if this is so, we should stop asking whether relationship exists.

But we should first note that in some cases of this sort, the relationship holds as long as the underlying subjects remain as they were, even if they come to be separate, while in other cases, the relationship comes into being when the underlying subjects come together, and in others, even when the subjects remain as they were, the relationship either ceases completely, or becomes different, as with right, and near. It is especially from these cases that the suspicion arises that there is nothing in things like this. RRKS

(2) Simplicius *in Cat.* 169,1-22

They find another difficulty: Is this relationship (*skhesis*) something with real being, or just a name expressed along with (*sunekpheromenon*) [a real being]? It is necessary, then, that there should either be no relationship at all among things that exist, or else that some relationships should exist while others should inhere without real being. But that we should not remove all relationship is clear from the fact that, just as Substance, Quantity, Quality and each of the other categories must be put among things that exist, so too must Relationship, since it too provides much benefit. For neither the genera nor whatever things are subordinate to them will have any community with each other unless there is some account taken of relationship among things that exist. It would be absurd to remove the community of things that differ from each other, and absurd too to remove consonance – not only that in sounds and numbers, but also that in substances and all potentialities and actualities, consonance, which being present in beings brings them to sameness and produces relationship with each other. Commensurability, the equal, the knowable and knowledge will also be removed; and if geometry and music are to do with relationship, and if these are without real being, then it would be laughable for them to waste their time over things without real being. How can God be said to be the object of desire for all things if there is no relationship between the object of desire and the desirer? Further, since among real beings some are prior, others posterior, if there is no relationship, the relationship of firsts to seconds and that of seconds to firsts will be removed; and if it is removed no association is left for them any longer; for there can be no unity between them (for body, soul, Intellect and God are not consubstantial) nor any fellowship in nature (for they are not of the same nature); but it is only according to relationship that the association of things that differ in this way can exist. BF

(3) Simplicius *in Cat.* 173,20-3

In cases where we say that 'this caused this' and 'this controls this' we are not taking things pure and simple, but we are considering some intervening function (*ergon*) which joins the agent to the patient and the controller to the controlled. BF

3(k) The four Stoic categories

Plotinus attacks the four Stoic categories in 6.1.25-30. These four highest genera are (i) the subject (*hupokeimenon*) or substance (*ousia*, understood as prime matter), (ii) the qualified (*poion*), (iii) the disposed (*pôs ekhon*) and (iv) the relatively disposed (*pros ti pôs ekhon*). The same thing, for example Socrates, can fall under all four classifications. The relatively disposed has already been explained above under **3(i)**. It is exemplified by Socrates standing in certain 'Cambridge' relationships, such as being taller than Theaetetus, relationships which he can gain or lose without himself changing.

For Socrates to be qualified as virtuous or as walking is for the mental command centre within him, the *hêgemonikon* which consists of physical *pneuma*, i.e. air and/or fire, to be disposed in a certain way. This *pneuma* is an elemental ingredient of his body, and all qualities are *pneumata*, even though not all will involve a command centre or rational beings. The quality is thus an ingredient or 'part' of the thing qualified. It suits Stoic physicalism that a Stoic quality thus turns out, unlike an Aristotelian quality, to be a body, but it is not a distinct body over and above the elemental ingredients which they are already committed to postulating.

The category of disposed has been less clear. Stephen Menn's suggestion is that to be disposed is to have a non-Cambridge characteristic which is not due to the presence within of an ingredient: e.g. the characteristic of sitting, where this is viewed not as a voluntary act involving the command centre, but as a geometrical or postural characteristic.

For the Stoics on relatively disposed, see

(1) Simplicius *in Cat.* 166,15-29, translated under **3(i)** above

(2) Simplicius *in Cat.* 172,1-5, translated under **3(i)** above

For the Stoics on disposed, see the attack in

(3) Plotinus 4.7 [2] 4 (8-21)

If [the Stoics] do not posit life and soul as anything besides *pneuma* what is their much celebrated 'somehow disposed' (*pôs ekhon*), in which they take refuge often under constraint to postulate another natural agency besides bodies? If not all *pneuma* is soul, because thousands of *pneumata* are inanimate, but they are going to say that *pneuma* somehow *disposed* is soul, will they say that this somehow-disposed and this relationship (*skhesis*) has being or is nothing? If it is nothing, there would be only *pneuma* and the somehow-disposed is only a name and so it will end up with their

saying that soul and God are nothing else but matter, and everything is a name and only that exists. But if the relationship is something that has being and is something distinct besides substrate and matter, residing in matter, but itself immaterial through not being composed in its turn of matter, then it will be a rational principal (*logos*), and not a body, but a distinct nature. RRKS

(4) Plotinus 6.1 [42] 30 (19-21)

Perhaps the [Stoic] somehow-disposed will fit only with [Aristotle's] posture (*keisthai*) and having on (*ekhein*). But what fits with having on is not somehow-disposed (*pôs ekhôn*), but just having on (*ekhôn*). RRKS

(5) Simplicius *in Cat.* 217,36-218,2

And how will the essence of corporeal qualities consist in *pneuma*, seeing that *pneuma* itself is composite, consisting of more than one ingredient, and has a divisible subsistence with its unity being acquired? RRKS

Reading

Eric Lewis, 'The Stoics on identity and individuation', *Phronesis* 40, 1995, 89-108.
Stephen Menn, 'The Stoic theory of categories', *Oxford Studies in Ancient Philosophy* 17, 1999, 215-47.
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David Sedley, 'The Stoic criterion of identity', *Phronesis* 27, 1982, 255-75.
Richard Sorabji, *Matter, Space and Motion*, London & Ithaca, NY 1988, ch. 6, esp. 87-93.

3(l) Plotinus on quality, and replies

Plotinus both criticises Aristotle's category of quality and provides a very different conception of his own. By way of criticism, he asks, 6.1.10, if there is anything in common to unite the Aristotelian category of quality. Certainly, we cannot include intelligibles, since they are prior to sensibles, 6.1.12 (44-5 & 51-3). His first suggestion is that quality might all be capacity (*dunamis*), but he is worried that incapacities are also qualities. And how is the shape of an individual thing a capacity? What about triangularity? The diversity is made even worse if the person with qualities has to be in the same category as the qualities themselves, 6.1.12 (13-15). Further, 6.1.12 (19-31), should one distinguish with a technical skill like boxing between the disposition of the soul which is a quality, and the ability to produce effects, which is a relative? This would not be true of capacities (*dunameis*) in general, because most capacities have a reality (*hupostasis*) independent of any relation they enter into. But boxing seems to be altogether related to an opponent. Simplicius, however, *in Cat.* 247,23-9, has no doubt that the boxer's skill is a quality.

Simplicius raises a fresh worry about the unity of the category of quality, *in Cat.* 223,16-22: if the term 'capacity' also has many uses, it may not be able to provide the unity Plotinus seeks. But he is more confident than Plotinus that it can, and

claims, 226,18-20; 227,24-7; cf. 244,20-7, that there is something in common to the uses of 'capacity'.

As regards Plotinus' worry on incapacity, Simplicius' main reply, *in Cat.* 224,21-225,1; 225,9-10; 13-31; 242,27-243,2; 247,1-8, is that capacity and incapacity imply each other. For an incapacity for one thing is a capacity for its opposite.

Concerning the shape of an individual thing, Simplicius replies to Plotinus, *in Cat.* 226,27-33, that this can count as a capacity, because a capacity does not have to produce its effects on something external, but can instead be the source of its owner's character and being.

Syrianus, *ap.* David (Elias in *CAG*) *in Cat.* 226,21-6, suggests that different kinds of quality may be connected by deriving from or relating to (*aph' henos, pros hen*) some central item.

One very important passage in Aristotle's discussion of quality, 10b26-11a5, tells us that some qualities admit of degrees, but that there was a dispute whether one justice could be called more or less a justice than another. An antecedent for this dispute is Plato's *Phaedo* 93A-94A. It is there said that the soul cannot be the attunement (*harmonia*) of the body, like the attunement of the strings of a lyre. For attunement admits of degrees whereas one soul is not more a soul than another. The whole idea of attunement connects with the idea of tightening and loosening the strings of a musical instrument and this analogy was frequently repeated in subsequent discussions. The soul is contrasted with virtue, which *is* here allowed to be a *harmonia*, and so presumably to admit of degrees.

Aristotle reports a rival view (perhaps Platonist) that it is only the *possession* (*ekhein*) of justice or health which admits of more and less. This discussion led to the idea of latitude (*platos*, Latin *latitudo*) or of a range of forms, which was important in medieval Latin philosophy, but whose Greek origins have not been fully recognised. It is discussed in **Physics 21**. These ideas were the subject of debate, recorded by Porphyry *in Cat.* 137,25-138,32; Simplicius *in Cat.* 283,29-291,18 (reporting also Plotinus and Iamblichus); Boethius *in Cat.* 257B. The claim that it is only the possession that admits of degrees was rejected by Plotinus (*ap.* Simplicium *in Cat.* 284,12-17; cf. Plotinus 6.3.20 (39-42)) and Iamblichus (*ap.* Simplicium in *Cat.* 288,18-30). The Stoics, however, wanted to say that neither virtue nor its possession admits of degrees unlike the 'intermediate skills', illustrated at Stobaeus 2.113,24-114,3 by being protreptic, persuasive, or good at spotting.

(1) Porphyry *in Cat.* 137,25-138,32

But how can one say anything clear about these matters, when there have been so many different schools of thought about them? For some have claimed that all states of matter and qualified entities become more and less intense, since matter itself admits of more and less. Some Platonists have taken this view. Others have held that some states and the <entities capable of having the state> that are qualified by them do not admit of a more and less, as is the case with the virtues and persons who are qualified by them, while other states and qualified entities do admit of intensification and relaxation, as is the case with all intermediate arts and intermediate qualities, and the persons who are qualified by them. The Stoics held this view. But there is a third view, which is the one Aristotle refers to, that holds that states cannot be more intense or more relaxed, but that the persons that are qualified by them do admit of a more and less: not all of them, however.

Q. How do you say that Aristotle refers to this school of thought?

A. I claim that he does so when he says: 'Some people dispute about this, for they utterly refuse to grant that one justice is called more or less justice than another, or that one health is more or less health than another, though they say that one person has health less than another or is more just or more healthy (10b32-11a1); ... they say that triangle and rectangle do not admit of a more, nor do any of the other shapes. For things that admit the account of 'triangle' or the account of 'circle' are all equally triangles and circles, while none of the things that do not admit of these accounts are any more triangles or circles than another, for a square is not more a circle than is an oblong, for neither of them admits the account of a circle' (11a5-12).

Q. Can you also tell us about a fourth view concerning increase and decrease of intensity in qualified things and in qualities?

A. Yes.

Q. What is it?

A. There was a view that held that immaterial and *per se* (*kath' hautas*) qualities do not admit of a more and less, but that all enmattered qualities and the things that are qualified by them do.

Q. And do you think that what these people held is correct?

A. No, I do not.

Q. Why?

A. Because the immaterial qualities that exist *per se* (*kath' hauta*) are not qualities but substances, and it is for this reason that they do not admit of an increase in intensity, since neither do other substances. SS

(2) Simplicius *in Cat.* 284,12-285,8

There are four doctrines concerning greater and less intensity of qualities and qualified things.

(i) Some, for example Plotinus and the other Platonists, declare that all qualities and qualified things admit more and less, because everything enmattered does so – matter has more and less because of its inherent indeterminacy.

(ii) There is another opinion over and against this which states that there is not more or less in the qualities themselves, such as justice and whiteness, since each is a whole and stands according to a single *logos* and for that reason does not admit more and less; degrees of intensity are rather to be found in what participates, since participation involves latitude (*platos*) and some participate more, others less; that is why states themselves are thought to admit more and less, although it is the qualified thing that admits degree. Aristotle seems to hint at this opinion when he says; 'One might wonder if one justice is said to be more justice than another', and later: 'One justice is in no way said to be more or less justice than another, ... but things that are spoken of as qualified by them indisputably admit more [and less]; for one man is said to be more literate, or more just, or more healthy, than another'. But when he says, 'so too with

literacy and the other conditions', he lumped states and conditions [explained by Simpl. *in Cat.* 237,25-238,2; see **3(w)** below] together, just as he did a little earlier with qualities and things qualified.

[284,32] (iii) The third doctrine is that of the Stoics, who distinguish the virtues from the intermediate skills, and deny that they can be more or less intense, while the intermediate skills do admit greater or less intensity. So according to them some states and qualified things do not admit greater or less intensity, while some admit both.

[285,1] (iv) There is a fourth doctrine which says that immaterial and *per se* (*kath'hautas*) qualities do not admit more and less, while enmattered qualities and things qualified by them do. This doctrine differs from the former in that the former makes no distinction between immaterial and enmattered qualities. Porphyry objects to this doctrine as wrong to posit immaterial qualities. He says: 'These are substance, and so, like other substances, do not admit greater of less intensity'. BF

(3) Iamblichus *ap.* Simplicium *in Cat.* 288,18-30

Iamblichus says: 'It would be even more absurd if quality were enmattered but did not undergo the same affections as the enmattered subjects that receive it; for it would scarcely be separable if it had certain distinctive (*idia*) functions (*erga*) separated from what is common. It would also be absurd if quality were always yoked to what is qualified, having a nature indistinguishable from it like a twin, while being entirely separable – if quality is not subject to intensification, while qualified things are. So perhaps in all these cases they were being sidetracked towards the immaterial *logoi*. For in the case of the virtues those who allowed progress, but rejected perfection in men, did not realise that they were supposing that those [virtues] that are perfect would be immaterial, and for that reason rejected those that were enmattered. If this is so, then the doctrine results in something of an entirely different nature; for Quality does not belong among immaterial things'. These are Iamblichus' actual words. But perhaps by this argument we should posit more and less in the case of Substance too; for it is enmattered. BF

Reading

On latitude:

Katerina Ierodiakonou, 'Aspasius on perfect and imperfect virtues', in Antonina Alberti, R.W. Sharples, eds, *Aspasius: The Earliest Extant Commentary on Aristotle's Ethics*, Berlin 1999.

Richard Sorabji, 'Latitude of forms in ancient philosophy', in Cees Leijenhorst, Christoph Lüthy, eds, *The Dynamics of Natural Philosophy from Antiquity to the Seventeenth Century*, Leiden 2002, with further references there and in **Physics 21**.

3(m) Plotinus on the origin in the intelligible world of qualities

So far, Plotinus has been addressing Aristotle's conception of quality. But his own view is that what Aristotle calls qualities are only shadows and traces of the

activities of intelligible forms, 2.6 [17] 1 (38-48); 2.6.2 (14-33); 2.6.3; 6.2.14 (14-22). This will be explained below under **3(w)**, which adds further supporting passages.

(1) Plotinus 2.6 [17] 3 (11-26)

But when discursive reasoning (*logos*) separates what is distinctive (*idion*) about the [intelligible realities], not removing it from the [intelligible world], but rather taking it and generating something different, it produces the qualitative as a part (*meros*) of substance, taking the superficial appearance. If this is so, nothing prevents heat also being a form (*eidos*) and activity (*energeia*) of fire, because it is conjoined by nature with fire, and not being a quality of it, and again being a quality in a different way. And nothing prevents it being a quality when it is taken on its own in something else, no longer being the shape of substance, but only a trace, shadow and copy abandoning the substance whose activity it is. Everything then is qualitative that is incidental and not activity [reading *energeiai*, nominative plural] and form, providing a kind of shape for substances. For example, states and conditions [*hexeis*, *diatheseis*, explained by Simpl. *in Cat.* 237,25-238,2; see **3(w)** below]) of subjects are to be called qualities, but their archetypes in which they primarily have their being are the activities of [those intelligible realities]. It is not that the same thing comes to be a quality and not a quality, but what is isolated from substance is qualitative, and what is with it is substance, or form, or activity. RRKS

3(n) Plotinus on when and where, and replies

For Aristotle, the two categories of when and where are not the same as time and place, which belong to the category of quantity (q.v.): *Cat.* ch. 6, 4b22-5. Rather they are separate categories of *in* time and *in* place. But not everyone agreed. The Aristotelian Andronicus and the Neopythagorean pseudo-Archytas put when and where with time and place, and made the latter distinct categories: Simplicius *in Cat.* 134,5-7; 342,21-5; 347,6-7; 357,27-32; 358,8-11. Plotinus, as explained above under Quantity, argued for time and place being relatives and treated when and where as *parts* of time and place, so that they would belong with time and place, instead of forming a separate category, 6.1.13 (1-3); 6.1.14 (7-8). Thus where becomes a relative, 6.1.14 (10-13).

Simplicius wants to return to Aristotle's classification. Where cannot be a relative, because, although where or *in* place is related to place, there is not a reciprocal relation of place to *in* place: *in Cat.* 360,7-21.

Simplicius admits that a certain relationship is relevant. Things in time have a relationship (*skhesis*) to time, and when embraces (*periekhei*) this relationship, *in Cat.* 347,21-3. It might also be said that what is in place, insofar as it is contained by place, is a relative 349,16-17. But when and where are separate categories, not relatives.

To this Plotinus had objected: why not postulate separate categories for in a vessel, in matter, in a substrate, for parts in a whole, and a whole in parts, genus in species and species in genus, 6.1.14 (19-24) ? To this Simplicius replies that, except for a vessel, which is a kind of place, the members of the other pairs do not

have sufficient independence from each other to count as one being *in* the other in the proper sense (*kuriôs*), *in Cat.* 349,19-350,9.

(1) Plotinus 6.1 [42] 13 (1-3)

When must be investigated as follows. If yesterday, tomorrow, last year and so on are parts of time, why will they not be in the same category as time? RRKS

(2) Plotinus 6.1 [42] 14 (8-24)

If we are talking about one thing in another, we are not talking about one thing, nor about something simple. Then, if we say that this man is here, we are generating a certain relationship (*skhesis*) of this man in this and of what receives to what it receives. Why, then, is [*where*] not a relative, if something was generated from the relationship of each to the other?

Then how does 'here' differ from 'in Athens'? But they will say that the demonstrative (*deiktikon*) 'here' signifies place, so that 'in Athens' does too, and in Athens belongs to place. Then if this 'in Athens' equals 'is in Athens', 'is' is predicated in addition to place, which it should not be, for neither [do we predicate] 'quality is', but only quality.

In addition, if in time and in place are something different from time and place, why will [Aristotle] not make *in a vessel* into another category, and *in matter* another, *in a subject* another, and a part *in the whole*, the whole *in the parts*, the genus *in the species* and the species *in the genus*? And in this way we will have more categories. RRKS

(3) Simplicius *in Cat.* 360,7-21

To this [Plotinus 6.1 [42] 14, preceding passage] it must be replied that there is a distinction between, on the one hand, a relation which is balancing and reciprocating and is of things said to be just what they are *of* or *than* other things, or [said] in some other way *in relation to* other things – this [relation] is observed specifically in the case of the relatives – and, on the other hand, the [relation] which is non-reciprocating but inclines in just one direction towards other things, producing its relation specifically towards time or place [sc. and not *vice versa*], and so which was not one of the things said specifically *in relation to* something, precisely because it did not reciprocate like relatives. For in the cases of [the concepts] where and when, the relation of place or time to what is in place or in time is not taken into account, but rather [just the relation] of what is in place to place [sc. and of what is in time to time]. But there is nothing remarkable if this [relation] sometimes assumes in addition the relation of relative, as in the case of *on this side*, *on the further side*, and *on the upper side*, *on the underside*. So too in the case of things in time, the old and the young, the recent and the ancient are outside the category of the relatives

even though they have a relation to time or are specifically to do with time, whereas the older and the younger, the more recent and the more ancient and suchlike manifest the relation special to relatives. RG

(4) Simplicius *in Cat.* 349,19-350,9

So perhaps one should say that not everything which is in something deserves a specific category, but only those things in which (1) one [component] contains and the other is contained, and (2) each [component] preserves its own nature, neither becoming part of the other, nor constituting the other – for in these cases alone does it happen that the thing itself which is in something [else] is a certain determinate nature subsisting in accordance with the relation itself [sc. of being in something] – and when (3) the universal has necessarily also to obtain, as for example the body's being in place and time: but the things which are in them [i.e. in place and time] subsist *in addition* [to them], and are separated from the *particular* time and place [in which they subsist].

[349,26] Of the other significations of [being] in something, however, some are constitutive, such as the parts and the whole and the genera and the species and the ruler and the ruled, and others cannot subsist separately [from what they are in], such as the form in matter, and the accident in an underlying subject, and this [accident] also becomes the form of the subject, which explains why the subject is also called after that [accident] – as for instance 'white' or 'increased' – and similarly for the other categories belonging to substance. How then could one thing be strictly *in* another thing when the things are not distinguished from each other *simpliciter*, in terms of their subsistent reality, but only notionally, in the way we distinguish the genera? But the things in time and in place are [genuinely] different from place and time. Hence also things which are the same in number sometimes come to be in one [sc. place or time] and sometimes in another, whereas it is impossible for numerically the same thing to come to be sometimes in one underlying subject and sometimes in another. And what is in a vessel is in place: for a vessel is a portable place. For this reason the legislators of names have established different names for the [category of] when – 'yesterday', 'tomorrow', 'last year', 'this year' and 'next year' – and for the [category of] where – 'in the Lyceum', 'in the market place' – whereas in the other cases of *being in* it is not customary to say 'the white is in the body', but rather 'the body is white', and 'the head is an animal's', 'man is an animal', 'the composite is [composed] out of matter and form'. This seems to me to solve the matter for the time being, but if it is possible to do it in another way too, that would be good. RG

Reading

Philippe Hoffmann, 'Les catégories *pou* et *pote* chez Aristote et Simplicius', in P. Aubenque, ed., *Concepts et catégories dans la pensée antique*, CNRS, Paris 1980, 217-45.

3(o) Plotinus on action and passion, and replies

Plotinus seeks to reduce Aristotle's two categories of acting (*poiein*) and being acted on (*paskhein*), or being an agent and being a patient, to two species of his own idiosyncratic category of undergoing change (*kineisthai, kinêsis*), 6.1.17 (14-19); 6.3.21 (8-9); 6.3.28 (1-2).

Against the claim that acting belongs in a category of undergoing change, Simplicius cites with approval Boethus and Iamblichus on the action of the divine Unmoved Mover in producing the rotation of the heavens, without undergoing change at all. This would be in general true of pure action, *in Cat.* 302,10-17; 311,13-20.

Plotinus further tries to make out that change (*kinêsis*) can be subsumed under *energeia* (activity), with which Aristotle had contrasted it, 6.1.15 (9-12); 6.1.16. He also wants to treat change as a timeless relationship, 6.1.16 (14-19), not in the sense of 'instantaneous', which Aristotle discusses in some passages, but in the sense of holding altogether outside time among the timeless realities of the intelligible world. Plotinus does not draw attention to the difference between these senses of 'timeless'.

Aristotle distinguishes the process of change (*kinêsis*) from activity (*energeia*) by saying that a change, like building a house, has to wait until the end in order to be complete, whereas an activity, like thinking, is complete at any stage, *EN* 1174a14-23, cf. *Metaph.* 9.6. This is reflected grammatically in the point that, when someone is building a house, we cannot say, until the end, 'he has built the house'. But as soon as someone is thinking, we can say, 'he has thought'. John Ackrill has argued that this is the central criterion, and it is only a supplementary point at *EN* 1174b7 that some activities can be instantaneous. Perhaps, for example, thoughts can be, but this is not a necessary condition for being an activity, nor is it sufficient, since Aristotle points out that something quite different (although Plotinus does not recognise the difference), namely, having changed, can occur instantaneously, when a pond freezes over all at once (*athroon*), or a space is filled all at once with light, as the instantaneous culmination of some underlying process of change, *Phys.* 1.3,186a15-16; *Sens.* 7, 446b28-447a6.

Ackrill has pointed out that Aristotle's criterion, which concerns when something is complete, ought to classify walking a mile and hearing a symphony as *kinêseis*, not complete until the end, whereas engaging in walking or in listening to music, being complete at any stage, should be *energeiai*. Thus, in effect Aristotle has succeeded in distinguishing *descriptions* of what is going on, rather than, as he intended, types of thing going on. Nonetheless, such a distinction could in fact have been very useful, say, to a Stoic philosopher who recommends living every hour as if your last, and pinning no hopes on the future. This attitude requires you to be concerned with certain descriptions of what you are doing, with 'composing music' rather than with 'composing a symphony', since the latter may never get completed. But Aristotle wants all walking to be *kinêsis*, because defined by its destination and starting point, 1174a29-b5, and all enjoyment to be *energeia* (1174a13-b14, esp. a14-23, uses the concept, if not the word) even though it is not identical with the *energeia* enjoyed, 1175b32-5. This rigidity over walking gives Plotinus an opportunity. He is able to argue that what has to wait for completion until the end is not walking but only walking a given distance. Walking itself, being complete at any stage, meets Aristotle's criterion for being an *energeia*, even though it is intended by Aristotle to be a *kinêsis*: 6.1.19 (8-15). In order to protect what is good in Aristotle's distinction from Plotinus' attack, it would be best to acknowledge that

Aristotle's criteria can only distinguish different *descriptions* of walking, such as 'walking' and 'walking a mile'.

Reading

J.L. Ackrill, 'Aristotle's distinction between *energeia* and *kinêsis*', in R. Bambrough, ed., *New Essays on Plato and Aristotle*, London 1965, repr. in Ackrill, *Essays on Plato and Aristotle*, Oxford 1997, ch. 9, 142-62.

Aristotle invites confusion in *Physics* 3, chs 1-3, because he there contrasts *energeia* (and equivalently *entelekheia*) with *dunamis*, as an actualisation as opposed to a potentiality awaiting actualisation. In this usage, *kinêsis*, so far from being what is contrasted with *energeia*, can actually be an *energeia*, and Plotinus exploits this too, without noticing the different sense of *energeia*.

In the first of these three chapers on change, *Phys.* 3.1,201a10-11, Aristotle allows that change is the actualisation (*entelekheia*) of what is potential as such. But although an actualisation in some way completes what is potential, that does not make it complete in the same way as an *energeia*. As pointed out by Themistius *in Phys.* 69,8-20, and repeated by Philoponus *in Phys.* 342,16-343,12, translated in **Physics 2(b)**, it matters that the potentiality completed in a change, for example in the process of sculpting a statue, is the capacity of the bronze to be in process of being sculpted into a statue. The actualisation of that potentiality is not, like an *energeia*, complete at every moment. A closely related point about what is actualised in the process of change is made in the modern literature by Kosman and Taylor. Already, Iamblichus, with the endorsement of Simplicius *in Cat.* 307,30-308,10, complains that Plotinus fails to appreciate the way in which a subject of change is in a potential state and what the actualisation of that potential state would be.

In the next chapter, *Phys.* 3.2, 201b31-2, translated in **Physics 2(a)**, Aristotle remarks that change (*kinêsis*) is thought to be a sort of activity (*energeia*), but incomplete. But Aristotle is reporting the views of others, and although he thinks 'incomplete' a good description of *kinêsis*, *energeia* would be applicable only in the sense contrasted with potentiality. Nonetheless, Plotinus at 6.1.16 (1-40) takes *energeia* to be the genus and 'incomplete' to be the differentia.

In the third chapter, *Phys.* 3.3, 202a22-b22, Aristotle describes the *energeia* (activity or actualisation) of a teacher as being a *kinêsis*, which is located not in the teacher, but in the learner. Plotinus exploits this use of *energeia* for the *kinêsis* of teaching, when in 6.3.23 (6-22) he talks of causing your feet to walk. But confusingly, Plotinus speaks of this as a *kinêsis* which comes to be *energeia* and resides in your feet (lines 13-20 translated in **Physics 6(g)**).

Reading

L.A. Kosman, 'Aristotle's definition of motion', *Phronesis* 14, 1969, 40-62.

C.C.W. Taylor, 'States, activities and performances', *Proceedings of the Aristotelian Society*, suppl. vol. 39, 1965, 85ff.

Besides exploiting the different sense of *energeia* in *Physics* 3.1-3, Plotinus seizes on Aristotle's remarks, mentioned above, about a pond freezing over all at once. He claims that this 'all at once' phenomenon shows that a change, no less than an *energeia*, can be instantaneous. Simplicius *in Cat.* 308,32-309,8, complains, *inter alia*, that it is only the culmination of the change, not the process which Aristotle makes instantaneous. Plotinus seems to be aware of that as a possible reply, but to deny that Aristotle is talking only of the culmination, 6.1.16 (33-7).

The misunderstanding over instantaneity continues to occupy Plotinus. He alleges that a *kinêsis* like walking can be timeless as much or as little as an *energeia* like seeing, 6.1.16 (14-19). He worries whether some will resist his subsumption of action under *energeia* by distinguishing some action as time-consuming, and therefore as *kinêsis*, 6.1.18 (1-4). He worries too how living and being happy can be classified as *energeia*, if they are not timeless, 6.1.19 (1-6).

(1) Simplicius *in Cat.* 308,32-309,8

Now, while Aristotle says that the transformation (*metabolê*) is all at once, in this way, Plotinus says: 'If the transformation is all at once, there is a change (*kinêsis*) which is both all at once and outside time.' Well, Aristotle would say that there is transformation in the sense of transforming, and transformation in the sense of *having transformed*. The former – [transformation] in the sense of transforming – is change, but the latter – [transformation] in the sense of having transformed – is a state of rest. And now if transformation in the sense of having transformed necessarily (*pantôs*) comes into existence out of [transformation] in the sense of transforming, and [if transformation] in the sense of transforming has prior existence [at the time] when the sun is about to rise, and [if] only the [transformation] in the sense of having transformed comes upon us imperceptibly, it follows that it could not exist *without* change, but it does *not* follow that the onset of the illumination *is* change. If, on the other hand, it is possible for [transformation] in the sense of having transformed to come about without the [process of] transforming, then that sort of transformation, namely the one [consisting] in the [state of] having transformed, would [*a fortiori*] not be change nor even [come about] with change. Rather, such transformations are activities (*energeiai*) and not changes. RG

(2) Plotinus 6.1 [42] 16 (9-19)

For example, walking was walking from the beginning. But if it was necessary to complete a stade's distance, and one had not yet completed it, the shortfall was not in the walking, nor in the change (*kinêsis*), but in walking that amount. It was, however, already walking and change, whatever the amount. At any rate, the person undergoing change has already changed, and the person cutting has already cut, and just as what is called activity (*energeia*) needs no time, neither does change, but only change of a specified amount. And if activity is in timelessness, so is change insofar as it is change in general [sc. not of a specified amount]. Or if it is inevitably in time because it has acquired continuity, then seeing which does not interrupt its vision would be in continuity and in time. RRKS

Iamblichus is reported as rejecting Plotinus' view. Activity, he says, is merely analogous to instantaneity; it is superior to change and can exist without it, although it can also, as with thought and imagination, accompany change. Even in

these cases, however, the activity of thought precedes the change, and leads it into activity. The change thus proceeds from the activity. This is a hierarchical view of activity and change.

(3) Iamblichus *ap.* Simplicium *in Cat.* 304,28-32; 305,14-20; 306,2-4

'But,' continues [Iamblichus], 'Plotinus seems not to agree with the purer opinions concerning activity (*energeia*), but instead to be misled into that conception of it according to which some people define being active (*energein*) in terms of being changed (*kineisthai*), and suppose that change – in the sense of being changed – and activity are the same thing; which is far from the truth.

[305,14] In general, those who say this are not aware of the pure genus of activity, nor of its separateness from change, nor of its priority over the [merely] active (*energeiai*); nor do they recall the way in which we say that thoughts are activities, namely by adducing the partlessness of the knowledge belonging to these [thoughts], [the fact that this knowledge is] simultaneous, instantaneous, all at once in the instant, and similar such things. For what the instant is in the case of time, this [we say] is what activity is thought of as being in the case of change, and [we say] that pure activity exists outside of change and that other activities, which are not observed without change, proceed from it (*proïenai*) [i.e. pure activity], as for example we say that imagination and perception are changes in respect of affection, but an activity in respect of form, and thus that some [activities] are not separate from changes, whereas others are separate: not separate are all those which are perfective of changes, preceding them (*proêgoumenos*) and leading them forward (*proagein*) into activity; separate are all those which are uniform and entirely unchanged.

[305,26] To this extent, certainly, one might tolerate those who drag down activities in this way, since [after all] it is also the case that some forms are enmattered, and the enmattered activities are seen to co-exist with these. But one cannot in any way tolerate those who go further and drag them [i.e. activities] down to *changes*. ...

[306,2] And it is clear too that to make change a common genus of acting (*poiêseis*) and being acted on (*peiseis*) is contrary to the opinion of Aristotle, [as expressed] both elsewhere and here in the arrangement of the division of the categories'. RG

Plotinus' chief remaining question is how to distinguish acting from being acted on, 6.1.19 (22-6); 6.1.20 (16-32); 6.1.21 (7-33); 6.1.22 (1-10). The criterion he tries is slightly different from that which Simplicius takes over from pseudo-Archytas and Iamblichus, who ask where the *cause* of the change or activity resides, *in Cat.* 314,10-28; 320,16-17. Plotinus asks instead where the change or activity itself resides, and experiences a great deal of difficulty, although that is not how Simplicius diagnoses his problems.

Simplicius reports from Nicostratus, at *in Cat.* 64,13-18, a worry about why

being acted on is treated as a separate category from acting. Why not in that case introduce being worn or had on as a separate category from wearing or having on? Part of his answer is that acting does not include being acted on in the right way, because shouting, walking, running and writing involves no associated being acted on, *in Cat.* 299,36-300,8. Another part of Simplicius' answer is that being worn or had on is accommodated under posture (*keisthai*), *in Cat.* 64,15-18.

There remains the question whether acting and being acted on should be treated as relative. Plotinus raises that question first for what he regards as their genus, change and activity, 6.1.17 (1-12), cf. 6.3.21 (9-17), and adds, 6.1.17 (12-14), that the same will apply to acting. His reply, approved by Simplicius 308,29-310,7, has already been recorded above in discussing his category of change. It is that change and activity do not have their whole being consisting in a relationship, as Aristotle's second definition of relative requires. At 6.1.18 (12-22) he applies the same point to thinking and perception. Simplicius *in Cat.* 319,28-34 criticises him in the belief that he is more reluctant to apply the point to thinking than to perception. However, at 6.1.22 (10-19), Plotinus considers that acting and being acted on might each be in a second category as well, that of relative, because the same change is a case of acting or being acted on, according to whether it is viewed in relation to what produces the change or what is changed.

(4) Plotinus 6.1 [42] 17 (1-12)

If someone were to say that neither activity (*energeia*) nor change (*kinêsis*) need a category of their own, but that one reduces them to relative, because activity belongs to what is potentially active, while change belongs to what potentially causes or undergoes change, we must say that what generates relatives (*pros ti*) is the bare relationship (*skhesis*) not merely being spoken of in relation to something else. But when there is some real thing (*hupostasis*), even if it belongs to something else and is related to (*pros*) something else, it has its own nature already before being so related. So activity itself (reading *autê*) and change and disposition, even if they belong to something else, do not lose being, and being conceived as, things in their own right, prior to being so related. Otherwise all things will be relatives. For absolutely anything has a relationship to anything, as in the case of the soul. RRKS

Reading

S.E. Gersh, *Kinesis Akinetos: A Study of Spiritual Motion in the Philosophy of Proclus*, Leiden 1973

Daniela P. Taormina, *Jamblique, Critique de Plotin et de Porphyre*, Paris 1999, chs 2-3, 57-132.

Robert Wisnovsky, *Avicenna's Metaphysics in Context*, London & Ithaca, NY 2003.

3(p) Plotinus against 'having on' (wearing), and replies

Plotinus rejects the category of 'having on' (wearing). He objects that if *ekhein* (to have) is confined to having something on, there are too few cases, while if it covers all the kinds of having, and many are listed later by Aristotle in *Cat.* ch. 15, there are too many to form a coherent category, 6.1.23. Simplicius *in Cat.* 368,1-11, thinks that the other uses of *ekhein* are irrelevant. Aristotle mentions them, specially to

warn readers that he is *not* trying to establish a category of such disparate items *in Cat.* 300,31-301,5.

As for the small number of cases, Simplicius replies that the phoenix is a distinct kind of bird, even though there is only one of it, *in Cat.* 371,10-14.

Plotinus asks, if there is a distinct category for having on (wearing), why not also for burning, cutting, burying, throwing away, or if you prefer, being draped on a bed, 6.1.23 (7-11). Simplicius replies that the first four are adequately covered by acting, the last by posture: *in Cat.* 370,12-30.

Someone might ask if having on and posture are not relatives, Simplicius *in Cat.* 301,15-18. But they do not involve the reciprocity of relationship that is required for relatives.

Iamblichus' interpretation exalts Aristotle's humble having on, with a paean to possession as conferring great benefit on mankind and reflecting the completeness of the universe, *ap.* Simplicium *in Cat.* 374,7-376,12.

3(q) Plotinus against posture, and replies

In rejecting the category of posture (*keisthai*), Plotinus again complains that there are too few examples, 6.1.24 (1). But Simplicius, thinking of the heavens in terms of an organism, says there are many examples in the physical universe, *in Cat.* 338,21-5.

Plotinus also complains that posture is merely a combination of two categories: configuration, or more generally quality, and where, 6.1.24 (2-6). Simplicius replies *in Cat.* 338,29-31, that this is no mere combination of configuration and where. Rather we are talking of different configurations in respect of (*kata*) position (*thesis*), and position (according to Aristotle *Cat.* 6b2-3; Porphyry *in Cat.* 141,29-142,5; Simplicius *in Cat.* 165,3) is a relative. Others of Plotinus' successors replied that neither configuration nor where are involved, *in Cat.* 339,2-7.

Plotinus claims that lying on (*anaklisis*) is a relative, 6.1.24 (10-12). It was seen under having on, that Simplicius denies that in posture the required reciprocity obtains, *in Cat.* 301,15-18. But in response to Plotinus, he makes his other favourite rejoinder, *in Cat.* 339,24-35, that being set up and lying down do not have their whole being in a relationship to up and down, but first have an independent character of their own (cf. 165,10-18 for further denial that posture is a relative).

3(r) Plotinus: intelligible being as a unity characterised by 'Five Kinds'

In 6.2 [43], Plotinus substitutes the Five Great Kinds, or genera, from Plato's *Sophist* as the categories which characterise the intelligible world. He thinks of these genera as creative principles which between them create the species that fall under them and eventually particulars. We ourselves could not think of genera this way, but then, as explained in **5** below, our genera are of a different and much more lowly kind. Plotinus maintains that there are precisely the five genera that Plato speaks of: being, rest, motion or change (*kinêsis*), difference and sameness. In 6.2.13; 14; 16 he eliminates the Aristotelian categories of quantity, quality and relative as not being primary genera.

(1) Plotinus 6.2 [43] 2 (3-22)

Consequently it is necessary for something that is a unity in this way to be one either in genus, with as its species the beings by which it is many and

one, or to be more genera than one but all under a single genus, or [that there should be] more genera but none of them ranked under the other but each encompassing the things below it (whether these are themselves lesser genera or species and individuals below them). All contribute to a single nature and out of them all arises the constitution of the intelligible realm which we do indeed call being (*to on*). If so, these are not merely genera but also at the same time principles of being. They are genera because below them there are other lesser genera and subsequently species and individuals. They are principles, if being consists of many as described, and the whole consists of these [genera]. However, if the number of constituents were more than one and, when the wholes came together, made the universe, without having anything below them, they would be principles but not genera. E.g. if someone were to create a sensible thing out of the four <elements>, fire etc.: these would be principles, but not genera, unless 'genus' is used in a different sense.

Since we now say that there are certain genera, which are themselves also principles, shall we complete the whole by mixing together all of them (each with everything below it), and shall we create a blend of all? FDH

In the next passage, Plotinus is speaking of the divine intellect's thinking and explaining why it contains five genera.

(2) Plotinus 6.2 [43] 8 (11-49)

For [its] activity (*energeia*) and change (*kinêsis*) rest on its thinking, whereas [its] substance and being rest on [its thinking] 'itself'. For, while being, it thinks itself also as being and as a being on which it is, so to speak, founded. For the activity towards itself is not substance, but being is that to which the activity is directed and from which it comes. Being is what is seen, not the [act of] seeing. But the [act of] seeing, too, has being, since it is something that comes from and is directed to [being]. Because it is in actuality, not in potentiality, it combines the two again and does not separate them, but identifies itself with that [*sc.* the activity] and that with itself. The most fundamental thing of all and that with which everything else is concerned has established rest which it does not possess as something acquired but from itself. Rest is the point where the thinking ends without having started, and from which it sets out without having set out before. For there is no change from change nor towards change. Moreover, the Form at rest is the limit of Intellect, whereas the Intellect is its motion.

[25] So everything is being and change and rest, and these are all-pervading genera and every subsequent thing is a particular being and a particular rest and a particular change. When anyone sees these three by coming into contact (*prosbolê*) with the nature of being, and when he sees being through the being in himself and everything else through everything else [in himself], i.e. the change in it [being] through the change in himself, and rest through rest, and when he has fitted these [in him] to those [in

Intellect] that have come to be all together and so to speak confused, and when he mingles them without keeping them apart – then if, so to speak, he separates them a little and holds them and distinguishes them, he sees being and rest and change, three and each of them one. In positing three and each of them one, has he not claimed them to be different (*hetera*) from each other and has he not separated them in difference (*heterotês*) and did he not see the difference in being? And when he combined them into one and [sees them] in unity and all as one, collecting them into the same thing again and looking at them did he not see the sameness coming to be and being? So we must add these two to the other three, the same and the different, so that the total number of genera becomes five for all things, and these [last two] will give to subsequent things [the characteristics of] being different and same. For each thing will be a particular same and a particular different; in general same and different without 'particular' can exist in a genus. Genera are primary because nothing will be essentially predicated of them. You will predicate 'being' of them, for they are being, but not as their genus for they are not particular beings. Nor is being the genus of change or of rest; for they are not species of being. For some things exist as species of being, others as participating in being. Nor again does being participate in them as its genera, for they have not risen above it nor are they prior to being. FDH

In the next passage, Plotinus describes how the other four genera join with being to produce species.

(3) Plotinus 6.2 [43] 19 (1-11)

So since these four are genera and primary, does each of them create species by itself? As if being could already divide itself of its own accord without the others? Or not: because one must take the differentiae from outside the genus, and they must be differentiae of being *qua* being, but the differentiae must not be being itself. Where will it get them from, then? Certainly not from not-beings. So if from beings, and the three remaining genera existed, it is obvious that [being gets its differentiae] from them and from being applied together with them and from being coupled with them and coming to be simultaneous with them. But as coming to be simultaneous with them they made what consists of all. How then do the others exist after what consists of all? And if they are all genera, how do they make species? FDH

For a similar view in Proclus, see Proclus *in Parm.* col. 650,19-34, translated under **5(g)**.

Reading

Frans de Haas, *John Philoponus' New Definitions of Prime Matter*, Leiden 1997, 176-7.

Steven Strange, 'Plotinus, Porphyry and the Neoplatonic interpretation of the *Categories*', *Aufstieg und Niedergang der römischen Welt* 2.36.2, 1987, 955-74.
K. Wurm, *Substanz und Qualität*, Berlin 1973, ch. 5.

Intelligible being for Plotinus has a certain kind of unity. We have already seen under **3(m)** that it is our discursive thought which draws distinctions in the intelligible world where things are not distinct in that way: 2.6 [17] 3 (11-26), translated there. Cf. (1-6) and 3.9 [13] 1 (12-14); 5.9 [5] 8 (8-20). Plotinus also describes how intellect does indeed contain the Five Kinds of Plato, several of Aristotle's categories and many other things besides, but not spread out, as in discursive thought. Rather it contains them in rational principles (*logoi*), which are like those in the seeds from which animals germinate, and are not spread out at all.

(4) Plotinus 6.2 [43] 21 (26-8)

Intellect possesses in the scope of its power all things and possesses them as realities in the way appropriate to Intellect. It possesses them as in thought, but not as in discursive thought (*diexodos*). RRKS

(5) Plotinus 6.2 [43] 21 (35-8)

It is like the rational principles (*logoi*) which produce animals. As the most accurate reasoning (*logismos*) would calculate was best, so intellect contains all things in rational principles which exist before any reasoning. RRKS

3(s) 'Present in' and 'said of'

So far, the criticisms have focused on individual categories. But the whole scheme of categories also came under attack.

At *Cat.* 1a20-b9; 2a11-b6, Aristotle uses two technical terms, 'present in' and 'said of', to distinguish substances from the other categories (the latter sometimes, though not in the *Categories*, called accidents of substance), and universal substances or non-substances from particulars. Non-substances (but not substances) are always *present in* a subject (namely, in substance). Universals (but not particulars) are always *said of* something less universal. We shall see below under **5(a)** that Aristotle hereby stands on its head Plato's view that universals exist prior to instances and explain their occurrence. Aristotle instead makes universals exist merely in the sense that there are instances.

The definitions of 'present in' and 'said of' created a new set of difficulties. Did they capture the intended groups successfully? Paleness is said to be *present in* substance, and Socrates' paleness in Socrates, because each can be said to be in these and not as a part, and each cannot exist separately from what it is in. Paleness as a universal is said of the particular paleness of Socrates, because not only can Socrates' paleness have the name 'paleness' predicated of it, but it can also have the definition of paleness so predicated. Similarly both the name and definition of man (mortal, rational animal) are predicated of Socrates. This will be relevant to the following sections.

3(t) Inseparability of particular accidents

Particular non-substances have been a subject of much modern controversy. Would an example be the paleness of Socrates, or the least discriminable shade of pink? The ancient commentators all assumed the paleness of Socrates. Aristotle distinguishes such particular accidents, as explained in the preceding section, by saying that they are not 'said of' but are 'present in' a subject. The paleness of Socrates is not 'said of' him, because that would mean, 2a19ff., that its definition also applied to him. But a colour is defined as a special kind of surface at which there is a given ratio of fiery, earthy and transparent elements, and Socrates is not such a surface. On the other hand, the paleness of Socrates is 'present in' Socrates, because it can be described as 'in' him, not as a part of him, and also (1a25) 'cannot exist separately (*khôris*) from what it is in'. It is these provisions concerning parts and inseparability which caused the most ancient discussion.

(1) Aristotle *Cat.* 1a24-5

By 'in a subject' I mean what is in something not as a part and is incapable of existing separately from what it is in. RRKS

In the present case, inseparability is the problem. Why should not the fragrance of Socrates float off into the surrounding air? Porphyry *in Cat.* 79,23-34, followed by Dexippus *in Cat.* 25,16-21, Ammonius *in Cat.* 28,8-29,4, claim that Aristotle allows it to, because he does not deny that individual accidents like fragrance can exist separately from what they *were* in. His point is only that they cannot exist separately from some subject or other to inhere in.

Ammonius added a new solution: the fragrance may after all stick to the particles of Socrates. The particles may detach themselves from Socrates and float free, but the fragrance does not detach itself from the particles. That this is what happens is shown by apples shrivelling as they give off their fragrance, and by cloths protecting our nostrils from bad smells, and by visibly emanating incense.

Philoponus, the most interesting of all the commentators, wrote a commentary also on Aristotle's *On the Soul* and realised that the particulate theory of odour would fall foul of Aristotle's claim that the sense of smell, like those of sight and hearing, operates at a distance from the body perceived, and depends on there being an intervening medium which takes on an appropriate effect. He therefore offers evidence that odiferous particles do not travel *all the way* to the organ of smell. Crocodiles in the water can smell meat suspended above the water, although the particles would not travel downwards, and vultures can smell carrion at a distance too great for particles to have travelled to them. But he still avoids the odour *separating* from its particles because what continues on to our organ of smell is not the odour, but only its *activity* (*energeia*).

(2) Porphyry *in Cat.* 79,23-34

Q. But how is it not absurd to claim that accidents are not separated [from their subjects], when the smell and sweetness of an apple are clearly separated from it?

A. But Aristotle does not say that [an accident is] incapable of being separated.

Q. What does he say, then?

A. He says that it is 'incapable of existing separately from what it is in'. It is one thing to be separated (*khôrizesthai*), and another to exist separately (*khôris einai*) from anything. He does not say that it is incapable of existing separately from what it *was* in, but that 'it is incapable of existing separately from what it *is* in'. The smell is capable of being separated from what it is in, but it cannot exist separately and on its own: either it ceases to exist or it is transferred to another subject. What he has indicated is that it is inconceivable that an accident should exist separately without any subject, not that it is incapable of being separated. SS

(3) Ammonius *in Cat.* 28,15-16

Our second solution is that the fragrance of the apple does not come to us on its own, but with some of the substance of the apple. RRKS

(4) Philoponus *in DA* 391,30-392,31

The difficulty that is thought to show through fragrance generated from an apple that qualities get separated from substrates we used to resolve [Philoponus *in Cat.* 35,24-31] as follows. We said that it is not the fragrance itself on its own that travels from the apple and suchlike, but it travels with some substance, and we used to make the argument persuasive by reference to the apple shrivelling with the passage of time, and to our breathing in the air when a cloth is placed on our nostrils (as we could not live if we didn't breathe), but not apprehending the odour. That was meant to show that the substance in which the object of smell was situated was coarser and couldn't filter through the cloth, while the air did filter through. What conclusion is to be drawn from the two arguments, that cited here and that claiming that through the diosmic capacity of air odours are incorporeally transmitted to the sense organ?

[392,3] We reply that there do indeed occur fine effluxes of bodies from fragrant things and especially from burning incense. And for that reason, when they are produced in the air, the greater and that which has the more vigorous odour overcomes the lesser. For even with sounds, where there is no efflux of bodies, the louder sound overpowers the softer, and the very brilliant overpowers the less brilliant. But even if some efflux does occur, it does not itself bring about apprehension by occurring in the organ. Rather, a medium, either water or air, is needed, which transmits the activities of the objects of smell. For how do water animals smell what is above the surface of the water? It is not plausible that this efflux goes downwards through the water. It will rather go upwards, if it is vaporous or smoky as Aristotle says next. But as it is, crocodiles smell flesh suspended above the surface of the water. And it is clear from the case of those which hunt by night that they pursue it not by sight, but by smell. Vultures

too perceive dead bodies from tens of thousands of distances away, and surely effluxes do not travel from the bodies as far as that.

[392,19] It seems, however, that our sense of smell, which is faint and weak, needs relatively strong activities, so that since activity transmitted across a large distance of air is diminished, as with visibles and audibles, we accordingly need the efflux from what is smelt to occur nearer to the nose, so that the activity may still be strong and the sense of smell may easily be affected by it, as the air in the nose is changed in quality. Similarly, those with weak sight or weak ears fail to apprehend visibles and audibles if people do not produce them close by. This is also why we do not apprehend odour when a cloth is set on the organ and especially if it is thick or if the odour is not vigorous (*drastêrios*). If the odour were vigorous, then even with a cloth on the nose the diosmic capacity of the air would suffice to act on the organ even without the fragrant vapour getting close to the organ. And the organ of smell is the mastoid protuberance towards the fore-part of the brain, after the isthmoid bones towards the interior. RRKS

Reading
John Ellis, 'The trouble with fragrance', *Phronesis* 35, 1990, 290-302.

3(u) Is Socrates an accident of place?

The commentators think of what is present in a subject in the sense defined at *Cat.* 1a24-5 (translated in the preceding section) as being an accident of it. The question then arises whether the definition has not by oversight made Socrates an accident of place, because he is present in place in the relevant way. The discussion in Porphyry immediately precedes his explanation (translated in the preceding section) of what the relevant way is, 79,23-34. That explanation would in fact make the problem still harder. A more elaborate solution is offered by Dexippus.

(1) Porphyry *in Cat.* 79,12-18

Q. But if accidents, which are not in their subjects as parts, cannot exist separately from what they are in, how is it that Socrates, who is in a place, but not as a part of that place, and cannot exist apart from some place, is not an accident?

A. Because an accident of a particular body cannot depart from that body and come to exist in other bodies, whereas Socrates, while incapable of existing apart from place, can be separated from this particular place. SS

(2) Dexippus *in Cat.* 22,26-23,16

Seleucus: But if indeed 'in a subject' is defined as 'being in something not as a part' (for it is impossible for it to exist separately from what it is in), and it is impossible for body to be separated from place, then body will be in place as in a subject (*hupokeinenon*). And similarly also for what is in time; for neither are they parts of it, nor can they exist without time; for

even if one were to say that they are separated from particular place and time, yet they are not separated from time and place without qualification.

Dexippus: In reply to this also we will say that none of the common natures (*koina*) is either a 'this' or a 'something', and so that which is in generic place or time will not be 'in something'. Further, that which is essentially in time is that which is moved or is subject to change, for it travels and changes along with time (if there were something sempiternal, it would only accidentally be in time, since it would be unmoving and unchanging; [but it would still be in time] since it is said to exist while time exists). If we accept this, then, if what moves, in so far as it moves, changes with time, it would not be 'in something' in the strict sense, nor yet 'in time'. For if, when moved, it were not in place, it would not be 'in time' either; for that is the same situation as if it were moved spatially. Then far more so it would not be in place, since both [place and time] are essentially in motion themselves – so it would have the same experience in respect of time as well; for neither of them holds still, so that the one will not *be* in the other, neither in the particular nor in the generic. But if something must be said to be 'in time', it must be said in a more general sense, not in a defined stretch of time; for there will be no means of indicating either motion or time, since both are considered as having extension (*en platei*), and come into being sequentially and according to the continuous generation of their parts; for one part is past, while another is yet to come. But if this be the case, then being in place and time must be held to be different from 'being in a subject', as in the case of colour. JD

(3) Ammonius *in Cat.* 27,17-24

Some then say that the definition given does not fit all accidents, and others say it fits other things also besides accidents. For they say that Socrates being in a place is in something and not as a part in a whole (for he is not part of the place) and he cannot exist apart from what he is in (for he cannot exist apart from a place), so that according to the definition Socrates is an accident, which is absurd. We reply then that Socrates can exist apart from what he is in. For if we suppose him to have left behind the place where he was earlier and gone to another place, he is no less Socrates, whereas the accident separated from its subject has been destroyed. MC&GMat

3(v) Are we to treat as accidents present in a subject what is in a species, or in a genus, or a whole which is in its parts?

This related set of problems is tackled by Dexippus.

(1) Dexippus *in Cat.* 24,19-25,7

Seleucus: But even if one were to grant that things in a subject are not

parts, yet it is strange that in the definition of what is in a subject there can often be found both things that are 'in a species' and 'in a genus' and as wholes in parts; for the above-mentioned definition of what is in a subject is common to these as well. For neither is the species part of the genus (for even when the species is destroyed the genus can survive, as for instance Animal, if Man were destroyed), nor could it survive without there being such a thing as 'animal', for how could it be a species if there were no genus? But also the whole, although being in its parts, neither is a part of them (for it would be absurd for the whole to be a part of its parts), nor can it exist separately from them. So the account has been shown to be common not only to what is in a subject, but also to things that are not in a subject.

[24,30] *Dexippus*: It is plain to everyone that although the species is not a part in the way that a hand is of the whole body, it is still considered as a part. But Aristotle did not say 'what exists in something but is not a part of it', but 'not existing in it *as* a part', so that he eliminated by this addition what is in something *as a species*. And the whole is not in any one of its own parts, but it is viewed as being in the totality of its parts, and he said 'what is in something *not as a part*'. So 'whole' must be understood as being included as a dual purpose term in the phrase 'not as a part'; for not only that which is attributed to something should not be a part, but also the substrate (*hupokeimenon*) should not be a 'part' of what is attributed to it; for the whole is described as being *in* its parts as being predicated of them as subjects. JD

3(w) How do differentiae fit into the categories?

The commentators had to consider how to accommodate various further entities into Aristotle's scheme of categories: differentiae, form and matter. Other examples are mentioned in Simplicius' survey at *in Cat.* 64,13-66,15, translated under **3(c)** above.

Frans de Haas has argued that the question about differentiae is a bogus one, because 'differentia' is the name of a role, not of a category. When the human species is defined as a rational animal, animal is the covering genus, rationality the differentia which differentiates this species from tigers and other species. Rationality is itself a quality and instances of differentiae may be taken from any category. But what about the differentia not *qua* rationality, but *qua* differentia? Whether we are talking about a substance like human, or a quality like rationality, the role of a differentia is to tell us part of its essence (*ti esti*). This in no way implies that a differentia is a substance. It only tells us what kind of predication is involved in stating the differentia of something, a subject discussed by Aristotle himself at *Top.* 1.9, 103b27-39. A similar point is made by Boethius, text (1) below, about the terms 'species' and 'genus': these merely designate the way in which, for example, man and animal are predicated.

(1) Boethius *in Cat. PL* 64, col. 176D, translated from forthcoming edition by Asztalos

And again, whereas animal is predicated of man, and genus of animal (for

animal is a genus), man lacks the name genus. For man is not said to be a genus; for man is not a genus but only a species. One should answer them that they have not noticed that the definition of predication of a subject is a predication that is predicated of each thing in respect of what it is and in respect of its substance. Now, species is not predicated of a man in respect of what he is (for if someone were to give a definition of man, he would not call him a species) but it is only a name that designates, whether the name 'man' is predicated of many things, that differ with respect to species, or of individuals only. For since man is predicated of individuals only, it is called a species, and since animal is said of things that differ with respect to species, we call animal a genus; and they are in some way names of names. Therefore, neither is genus predicated of animal in respect of what it is, nor is species predicated of man in respect of what he is, but, as has been said, they are only things that designate in what way man or animal are predicated of their own subjects. Accordingly, it is not to be wondered at, if the predication of a predicate that is not said of a subject cannot reach the subject of those things that are said of a subject. MA

Nonetheless, the commentators asked whether the differentia of a substance is a substance or non-substance, for example a quality. In the latter case, they regarded it as a mere accident of substance. They were worried by two passages cited by Lucius and Nicostratus, which seem to prevent a differentia from being 'present in' a substance and so to prevent it from qualifying as a non-substance. First, the differentia of a substance does not seem to meet Aristotle's 'not as a part' requirement at *Cat.* 1a24-5 for being present in a substance, since in a certain sense a differentia is a *part* of the substance it differentiates, since it completes that substance. Secondly, Aristotle tells us at 3a21-8, that the differentia is not in a substrate at all, so that again it should not qualify as present in a substance. But this time Aristotle adds that the differentia shares this characteristic with substance, a remark which appears to distinguish the differentia from substance after all, as well as from non-substance.

The first of these two passages, 1a24-5, is not so problematic for the commentators. It suggests that differentiae of substances, and other completers (*sumplêroun*, cf. Plotinus 6.3.8 (23-30) in **3(e)** above) of substance, can still be classified as substances. And this is the view taken of completers in general, without special mention of differentiae, by Porphyry *in Cat.* 95,22-35, text (2) below, Simplicius *in Cat.* 48,1-49,9, text (4) below,and of differentiae in particular by Alexander *Quaestio de differentiis specificis*, p. 178 Badawi = §11 Dietrich, text (6) below. Support was sought for this verdict from *Cat.* 3a29-33, where Aristotle says that parts of substances – though he is more likely to be thinking of heads and hands than of differentiae – are substances, Porphyry *in Cat.* 94,17-26, text (3) below. The only qualification Porphyry adds, *ap.* Simplicium 48,11-34, text (4) below, is that a differentia like rational can still be seen as an accident of something, not admittedly of substance, but of qualityless matter, since it is present in matter, *not* as a part, and is inseparable from it. But qualityless matter is only a first subject, to borrow Aristotle's expression at *Metaph.* 7.3,429a1-2, whereas we have been talking about second subjects such as e.g. Socrates.

The difficult problem is Aristotle's distinction at *Cat.* 3a21-8 of differentia from substance. Porphyry's response, *in Cat.* 95,17-20, text (2) below, is that the differentia after all is neither merely a quality, nor merely a substance, but a substantial

quality (*poiotês ousiôdês*, which can also be translated 'essential quality'). Dexippus *in Cat.* 49,4-6, text (7) below, and Simplicius *in Cat.* 99,3-9, text (5) below, both reflecting Iamblichus, treat the differentia as intermediate between substance and quality or accident.

Ammonius' school in Alexandria, whether or not it differed in general from the Athenian school which Simplicius joined, disagreed on this point: being intermediate would turn the differentia into an eleventh category, Ammonius *in Cat.* 46,10-19, text (8) below; Philoponus from the voice of Ammonius *in Cat.* 64,22-66,12; David (= Elias in the *CAG* edition) *in Cat.* 173,13-35. Philoponus *in Cat.* 66,13-25, text (9) below, gives four reasons why Aristotle meant differentiae to be taken as substances. Moreover, it is said, Aristotle at *Cat.* 3a21-8 never intended to distinguish differentia from substance, but only from the *composite* substances, Ammonius *in Cat.* 45,21-46,10, text (8) below, or from the familiar substances, Philoponus *in Cat.* 67,1-3, text (10) below, which he was discussing.

Plotinus plays a role in this debate. Initially, he appears to favour a different verdict from the other commentators, that the completer of a substance can perfectly well also be a quality, 2.6 [17] 1 (18-42); 2.6.2 (2-7). But then he protests that the whole framework of the question is misconceived, because qualities and completers are not the sorts of thing we suppose. What we think of as completive qualities are really the activities of intelligible forms. What we think of as accidental qualities are only traces and shadows of those activities, so, 2.6.3 (24-9), text (14) below, we never find the same thing being both completer and quality. As for the intelligible world itself, its unity means that completers or differentiae of the substances there are merely something that our limited understanding needs to distinguish, 2.6.1 (38-48; 53-8); 2.6.2 (14-34); 2.6.3; 6.2 [43] 14 (14-22), texts (12), (14), (15) below.

At 2.6.2 (30-4), text (12) below, Plotinus refers to two types of condition (*diathesis*), one easily removed and one persistent (*emmonos*). The reference may be to a contrast between the meanings of *diathesis* in Aristotle, *Cat.* ch. 8, 8b27 and in the Stoics, which Simplicius explains, *in Cat.* 237, 25-31, text (13) below. Aristotle distinguishes condition (*diathesis*) from state (*hexis*) as being less persistent and stable. The Stoics, on the contrary, contrast it as not admitting of degrees, and so being, as they say, in a sense *more* stable (*monimôteros*).

(2) Porphyry *in Cat.* 95,10-35

Q. If, then, a differentia is not a substance – for you claimed that it was not a substance, even though it is like substance in not being in a subject – nor is it an accident – for it is not in a subject – but there is nothing intermediate between substance and accident – for every being is either in a subject or not in a subject, for they are all either substances or accidents, accidents those items that are in the nine categories, substances those that exist in the way that substances do – if, then, a differentia is neither a substance nor an accident, what could it be?

A. Aristotle says that it is not a mere quality – for then it would be an accident – nor a mere substance – for then it would be reckoned among the secondary substances – but that it is a 'substantial quality' (*poiotês ousiôdês*). Therefore it is not predicated in the essence (*ti esti*) of what it is predicated of, but as an essential qualification (*poion ti esti*).

Q. Show how the differentia is a substantial quality.

A. Substantial qualities are those that are completers of substances. Completers (*sumplêrôtika*) are properties the loss of which destroys their subjects. Properties that can be gained and lost without the subject being destroyed would not be substantial. For example, heat is a property of hot water as well as of fire. But it is not a substantial property of water, for when the heat is removed the water is not destroyed by becoming cold. But it is a substantial property of fire, for fire is destroyed if its heat is taken away. And differentiae are indeed like this: they are substantial qualities. For if 'rational' is taken away from man, man is destroyed, and if 'land-animal' is taken away from him, he is destroyed, and if 'mortal' is taken away from him, he is destroyed, i.e. if he changes into something immortal. Hence the differentia is included under the definition of substance, since it is a completer of substance, and the completers of substances are substances. Also, accidents do not reveal the nature of a substance, but the differentia does. For man is an animal, and the differentiae reveal what sort of animal he is, so that they will be substantial qualities. SS

(3) Porphyry *in Cat.* 94,17-26

Q. But how can he say that not being in a subject is a common property of substances, when the parts of substances, which are substances, are in a subject, namely in the whole? For surely the parts are in the whole?

A. But being in a subject was defined as being in something but not belonging to it as a part. The parts of substance, such as a hand or an eye, are in the whole as parts. Accidents are therefore in a subject according to this definition, but the parts of substances are not in a subject. They are in substances as wholes, but as substances and not as accidents. So not to be in a subject is common both to substances and to differentiae, but this is not a distinctive property (*idion*), that is, a property [in the strict sense], which is something that is a property of all substances and only of substances. SS

(4) Simplicius *in Cat.* 48,1-49,9

Lucius and his followers also raise a difficulty about calling what is in a subject what is 'not as a part'. 'For if we call the completers of the substance (*sumplêrôtika tês ousias*)', they say, 'parts of it, and colour, shape, and size and in general quality and quantity complete the being of the sensible body in general (for there could be no body without colour and shape), while the being of this body, e.g. snow, is completed by whiteness and coldness, it is necessary to make a choice: either not to say that these things are in a subject or that it is not right to assert that "what is not as a part" is one of those things in a subject. And how, generally, can completers be said to be in a subject? For Socrates' shape is not in Socrates as in a subject, but if anything, things which enter already completed things from outside would be in them as in a subject.'

[48,11] In response to this problem Porphyry said, 'Subject is twofold, not only according to the Stoics, but also according to the earlier philosophers. For the qualityless matter, which Aristotle called body (*sôma*) in potentiality, is the first meaning of subject, and secondly, what subsists commonly or peculiarly qualified. For both the bronze and Socrates are subject for things which come to be in them or are predicated of them. Many of the things which come to be in something,' he says, 'are, relative to the first subject, in a subject, e.g., all colour, all shape, and every quality is in the first matter as in a subject, not existing as a part of it and incapable of existing separately from it. In the case of the second subject, not all color nor all quality is in a subject, but [they are] whenever they are not completers of the substance. At least white then, in the case of wool, is in a subject, while in the case of snow it is not in a subject, but completes the substance as a part and is rather a subject according to the substance. Likewise also heat is part of the substance of fire, while it comes to be in iron as in a subject, since it both comes to be in and departs from the iron without the destruction of the iron.

[48,26] Moreover, Aristotle here takes the so-called second subject to be the composite and indivisible substance, which, he says, is neither in a subject nor said of a subject. He says, reasonably, that everything which is not said [to be] essential (*ousiôdes*) to it, but accidental, is [in it] as in a subject, just as heat is in iron. And the completers, like the heat of fire, he would call part of fire, while [it is] in the qualityless matter as in a subject.' JE

[48,33] I believe it is reasonable to respond to this solution, that if only that which comes to be and vanishes is 'in a subject', these two [criteria], 'in a subject' and 'not in a subject', will not comprise all categories any more. For if 'not in a subject' designates substances, and 'in a subject' [does] not [designate] all quality, but only supervening [quality], not all genera would be comprised.

Well, one should say that the qualities which do not supervene, but are completers of the substance, are parts of the substance, and are themselves substances and are taken together with substance: for the parts of the substance are substances according to Aristotle (*Cat.* 3a29-32). For that reason, perhaps, he did not call substance 'subject', but 'not in a subject', with a view to including such qualities as well. FDH

(5) Simplicius *in Cat.* 99,3-9

But it is worth investigating which is the best opinion about the differentia among the ones mentioned. Well, [the best opinion is] that it occupies an intermediate position between quality and substance, on account of which it contributes to [something's] being of a certain quality (*suntelei eis to poion einai*) and is said to determine the quality (*to poion*) concerning substance and not as being in a subject. Therefore, Iamblichus says, one should add to the definition of what is in a subject 'without contributing

anything to the being (*ousia*) of the subject'. For differentia also completes the species. FDH

(6) Alexander *Questio de differentiis specificis* §11 Dietrich, Göttingen 1964, translated from the Arabic (another version probably of same work in Badawi, Cairo 1947, p. 178)

On account of this, the differentiae of 'living being' are substances, not living beings, because *substance* is the genus of 'living being' and retains its nature both with regard to the genera that are composed of matter and form, and with regard to the single, simple genera – I could say with regard to corporeal and incorporeal substances. RWis

(7) Dexippus *in Cat.* 49,4-6

It is the same story, then, also with the differentia; for it too will hold an intermediate rank between quality and substance, because it contributes both to something's being and to its being of a certain sort (*poion*). JD

(8) Ammonius *in Cat.* 45,21-46,19

Now Aristotle's teaching here concerns only composite substance that is subject to coming into being and destruction, I mean individuals, species, and genera. And so having compared substances with one another, he compared species alone and genera and then individuals, too, since he set himself to teach about them as well. But he made no mention of differentiae, since they are simple and he is constructing a definition of composites, as has [already] been said. It is for this reason, therefore, that Aristotle says that this [sc. not being in a subject] is 'not a distinctive (*idion*) property of substance'. He did not mean every substance, absolutely, but composite substance. And that was reasonable. For [not being in a subject] belongs not only to the composite, but also to the simple, i.e. to differentiae, to *rational* and *irrational*. And that is why he seemed to be distinguishing differentiae from substances.

[46,11] Others say that differentiae are not substances without qualification, but that some of them are related to substance, such as *rational* and *mortal*, some are related to accidents and border more closely on them, such as the black in the raven or white in the swan, and some are exactly in the middle between substances and accidents, such as the heat in fire. (For on the one hand it partakes of accident in that it is a quality, and on the other it partakes of substance in that it completes its subject.) These people have made a clever effort, although it is not entirely correct. For under what category shall we rank these [differentiae]? Or might we need an eleventh? That is absurd. MC&GMat

(9) Philoponus *in Cat.* 66,13-25

That differentiae are agreed to be substances is clear from the fact that they are completers of the species and are predicated of them substantially (*ousiôdôs*). For if they complete substances, they are of course substances, since accidents do not complete substance.

It is clear that Aristotle, too, believed them to be substances because he intends the parts of which substances consist to be substances when he says 'Let the parts of substances not confuse us' (*Cat.* 3a29) and again 'It belongs to both substances and differentiae that everything is called synonymously after them' (*Cat.* 3a33-34 [Aristotle means that anything called e.g. a man, or rational, is so–called in one and the same sense]).

It is clear also from Porphyry's statements. While treating of differentiae in accordance with Peripatetic doctrine he says 'the differentia is that by which the species possesses something over and above (*perisseuei*) the genus' (*Isag.* 10,22-23). Everything has something over and above something else by a part of its own. So the part is a substance too, since the species is also.

So judging both from Aristotle's own words and from Porphyry's statements which are in accordance with Aristotle's opinions, Aristotle too intended differentiae to be substances. FDH

(10) Philoponus *in Cat.* 67,1-3

So now Aristotle knows that differentiae are substances, but did not bring them under the category of substance, because they are unfamiliar to the average person. RRKS

(11) Plotinus 2.6 [17] 1 (38-48; 53-8)

But nonetheless heat is what completes (*sumplêroun*) visible fire, and whiteness the other [white lead], so that the same items will be completers not qualities, and qualities not completers. And it is strange to say it is one thing in what it completes and another in what it does not, when its nature is the same. But then [one must say] that the rational principles which make these items are substantial (*ousiôdeis*) wholes, but that what they produce counts in the [Intelligible] World as something, but here as qualified and not something. RRKS

That is why we are constantly going wrong in our enquiries about what something really is, losing our grip on it and being swept away into considerations of Quality. For fire is not what we say it is when our gaze is deflected to quality; rather its being is Substance, while what we now look at and what our gaze is deflected to when we speak of it diverts us from what it really is, so that we define only the quality. ...

[53] We shall say that Substance in the Intelligible World, having a more authentic and purer being, really is Substance – as far as its differentiae

allow it; it would be better to say that Substance is spoken of with the addition of activities, appearing to be the perfecting of the One, but perhaps being less perfect because of the addition, the lack of simplicity and the fact that it already has departed from simplicity. BF

(12) Plotinus 2.6 [17] 2 (14-34)

But the form is a quality.

No; the form is not a quality, but a rational principle (*logos*).

So what is the result of the rational principle and the subject?

Not what is seen and what is burning; that is qualitative.

Perhaps one could say that the burning is an activity (*energeia*) deriving from the rational principle.

Then the heating and whitening etc. would be actions (*poiêseis*), and we shall have nowhere left to put Quality. The answer is that whatever are said to complete (*sumplêroun*) the Substance should not be called qualities, since those of them which derive from the rational principles and the substantial powers are activities; qualities are what are outside all Substance, not what appear to be qualities in some places but not in others; they produce something extra after substance, like virtues, vices, ugliness, beauty, health and particular configurations. Triangularity and quadrangularity are not qualitative *per se*, but we must admit that anything made triangular, in so far as it is shaped, is qualitative – not the triangularity but the shaping. It is the same with skills and aptitudes.

Consequently Quality is a condition (*diathesis*), either acquired or inherent from the outset, added to Substances that are already Substances; if this condition is not there, the Substance is no less a Substance. In addition it is either easy or hard to remove, so that there are two types of it, the easily removed and the persistent (*emmonos*). BF

(13) Simplicius *in Cat.* 237,25-31 (explaining last distinction)

It is also worth examining what the Stoics have to say about these terms. For some people believe that they hold an opinion which is the converse of Aristotle's (*Cat.* 8, 8b27), that condition (*diathesis*) is more stable (*monimôteros*) than state (*hexis*). There is some basis for this belief, not because the difference between the two terms lies in being more or less stable, as the Stoics say, but because conditions differ; for they say that states can be more or less intense, but that conditions cannot be made more or less intense. BF

(14) Plotinus 2.6 [17] 3 (1-29)

The white in you must therefore be considered to be not a quality, but an activity (*energeia*) that clearly results from a power – the power of whitening. In the Intelligible World too all the so-called qualities are activities,

which get their qualitative nature from our way of thinking of them, because each is a distinctive feature (*idiôtes*), marking off, as it were, Substances from each other and having its own distinctive (*idios*) character in respect of itself.

In what way then is Quality in the Intelligible World different? For qualities in the sensible World too are activities.

The answer is that Qualities in the Intelligible World do not reveal what sort of a thing the subject is, nor any variation or character in it, but only that the so-called quality in the Intelligible World is an activity. Consequently it is clear *ipso facto* that, when the subject has a distinctive feature (*idiotês*) of a substance, it is not qualitative. BF

[11] But when discursive reasoning (*logos*) separates what is distinctive (*idion*) about the [intelligible realities], not removing it from the [intelligible world], but rather taking it and generating something different, it produces the qualitative as a part (*meros*) of substance, taking the superficial appearance. If this is so, nothing prevents heat also being a form (*eidos*) and activity (*energeia*) of fire, because it is conjoined by nature with fire, and not being a quality of it, and again being a quality in a different way. And nothing prevents it being a quality when it is taken on its own in something else, no longer being the shape of substance, but only a trace, shadow and copy abandoning the substance whose activity it is. Everything then is qualitative that is incidental and not activity [reading *energeiai*, nominative plural] and form, providing a kind of shape for substances. For example, states and conditions of subjects are to be called qualities, but their archetypes in which they primarily have their being are the activities of [those intelligible realities]. It is not that the same thing comes to be a quality and not a quality, but what is isolated from substance is qualitative, and what is with it is substance, or form, or activity. RRKS

[26] For nothing enjoys self-identity when it is alone in something else, when it has fallen away from being a form and an activity. But that which is never the form of something else, but always an accident, is purely quality, and that alone. BF

(15) Plotinus 6.2 [43] 14 (14-22)

Elsewhere we felt it right to consider that whatever properties complete (*sumplêrôtikos*) substance are qualities in a different sense (*homônumôs*), while those that come in from outside subsequent to substance and belong to it really are qualities and that the former, being in substances, are their activities, while the latter, being subsequent to substances, are thereby affections. But now we are saying that the features of a particular substance in no way complete the substance; for no substantial (*ousias*) addition is made to a man in that he is a man, but he is a substance from further back, before he comes to differentiation – just as he is already a living creature before he reaches rationality. BF

(16) Simplicius *in Cat.* 209,9-11

It is easy to decide why whiteness, though remaining one and the same, has become [a] substantial (*ousiôdês*) [quality] in the case of white lead and milk, but when ... [lacuna] . RRKS

Reading
Jonathan Barnes, *Porphyry: Introduction*, Oxford 2003, 350-6.
Frans de Haas, *John Philoponus' New Definition of Prime Matter*, Leiden, 1997, 180-250.

3(x) Are differentiae potential or actual in the genus?

As differentiae can be contraries, the Aristotelians said they could exist in the same genus only potentially. The Neoplatonists, while allowing this for the lowly kind of genus (see **5** below) which Aristotle is talking about, denied it for the higher Platonic genera. These genera are active substances and their differentiae exist in them in actuality. Ammonius adds that the differentiae are not contraries, for one supports the other.

(1) Plotinus 3.2 [47] 16 (45-58)

[...] in the universe we also see the contraries, such as white and black, hot and cold, and of course winged and wingless, footless and footed, rational and irrational, and all are parts of a single universal living being. The universe agrees with itself while its parts fight each other everywhere, and the universe is in accordance with a rational principle (*kata logon*). It is necessary that this single rational principle is a single rational principle from contraries since such contrariety brings it its structure and, so to speak, substance. For if it were not many, it would not be all, nor a rational principle. But as rational principle it is internally differentiated and the maximum differentiation is contrariety. So if in general it is different and makes something that is different, it also makes something that is different to the highest degree, but not less different. Therefore when it makes something that is different to the highest degree, it will also necessarily make the contraries, and it will be complete not if it merely makes itself into different things but if it also makes itself into contraries. FDH

(2) Porphyry *Isag.* 10,22-11,6

They define differentiae by saying: a differentia is that by which the species surpasses the genus. For man has more than animal; he also has rational and mortal. Animal is *none* of these, since if it were, where would the species get their differentiae? But neither does animal have them all, since then the same thing will have opposites at the same time. Rather, as they think, it *potentially* has all the differentiae of the things under it but none

of them *actually*. In this way, neither does anything come from non-being nor will opposites belong to the same thing at the same time. PVS

(3) Ammonius *in Isag.* 103,9-26; 104,12-31

One should know that the Platonists oppose this solution. They say that the differentiae exist in the genera in actuality, and they claim that one need not be afraid to suppose that rational and irrational, mortal and immortal, exist in the genera in actuality. In order to show this, they use the following arguments: First, they say, rational is not contrary to irrational, nor mortal to immortal. For contraries destroy each other, but not only do these not destroy each other but they even support each other. For rational and immortal support mortal and irrational; e.g. god, being immortal and rational, generates what is mortal and irrational; man being rational, becomes the keeper and saviour of the irrational; the angels, being immortal, become the keepers and guardians of the mortals. So neither rational and irrational nor mortal and immortal are contraries. If they are not contraries, it is not impossible for them to exist in the genera simultaneously, since irrational powers (i.e. anger (*thumos*), appetite (*epithumiae*), perception and rational life) are seen to exist simultaneously in one animal, the human being.

[103,23] Furthermore, they say that even if they were contraries, it is not at all absurd for them to exist in the same genus in actuality, because they do not exist in a body as their subject but in something incorporeal (for the genus is incorporeal), and contraries can exist in incorporeals. [...]

[104,12] On the other hand, if the differentiae are in the genera potentially, what is it that renders them in actuality in the species? For everything that is potentially is brought to actuality by something already actually such. E.g. cold water which is potentially hot becomes actually hot by means of the fire which is actually hot, and the child who knows grammar potentially is brought to know grammar actually by the grammarian who knows grammar actually. So if the differentiae exist in the genera potentially, but are brought to actuality, they will need something else that possesses the differentiae in actuality. But there is nothing else besides them, so the differentiae are not in the genera potentially.

[104,21] Again, everything that exists potentially is imperfect, whereas what exists in actuality is perfect. So if the species possess the differentiae actually and the genera possess them potentially, the lowest species of all will be more perfect and more honourable, and the highest genera of all will be less perfect and less honourable, which is absurd. For in that case the effects would be more perfect and more powerful than their causes. So it is necessary that the differentiae exist in the genera in actuality.

[104,27] So, is the Peripatetic [i.e. Aristotelian] account to be rejected entirely? We say no: there are three kinds of genera, as we often said, and the Platonists talked about the genera before-the-many (the differentiae exist actually in the genera before-the-many, for the principles (*logoi*) of

everything there exist actually), whereas the Peripatetics talked about the genera in-the-many. FDH

Reading

Frans de Haas, *Philoponus' New Definition of Prime Matter*, Leiden 1997, 176-7.
A.C. Lloyd, *Anatomy of Neoplatonism*, Oxford 1990, 81; 85-95.
A.C. Lloyd, 'Neoplatonic logic and Aristotelian logic', *Phronesis* 1, 1955-6, 68-71; 153-4.
K. Wurm, *Substanz und Qualität*, Berlin 1973.

3(y) Is form substance or an accident of matter?

Outside the *Categories*, Aristotle treats form as the most serious candidate for the honorific title of substance. One might therefore not expect it to be treated as an accident. And Alexander(?) emphasises that form is not related to matter in the way that an accident is present in a substance. This is particularly clear for the forms of natural things, as opposed to artefacts. The soul cannot inhere in matter because there is no independently specifiable matter in which it inheres: only ensouled matter is available and the inanimate matter has passed away. As for prime matter, it does not exist in actuality. Admittedly form is in the substance composed of matter and form, but it is a *part* of that, so by the definition of 'inherence', *Cat.* 1a24-5, translated above in **3(t)**, cannot be said to inhere in it.

(1) Alexander(?) *Mantissa* 119,31-120,17

May it not be that there is a way of being in something different from being in a subject, [namely] the [way] in which form is in matter? For it is not possible for form to be in matter as in a subject, if what is in a subject is 'what is in something not as a part and is incapable of existing separately from what it is in'. For the subject of what is in a subject has got to be a 'this-something'; and with reference to being in actuality, nothing without a form is a 'this-something' and that in which [something] is said to be.

[120,2] At any rate, it is for this reason that matter cannot have real existence (*hupostasis*) just by itself, because the form is not yet in it. For it is with the form that each of the things that are is a 'this-something'; for it is according to the form that everything is what it is said to be. Accordingly the natural form will not be in matter as in a subject. For the form which comes to be by art is in a subject, in virtue of the subject's being a 'this-something' and having a form; it is in this that the craftsman produces and applies the form relating to the art. But one cannot also say that the natural form is in the matter in this way; for the matter is not in itself a 'this-something' or a subject in actuality.

[120,9] If then the natural form is not in a subject, and the soul is a natural form, neither will the soul be in a subject. For the soul does not come to be in body without qualification, since it would [then] come to be in every body, and so also in the simple [bodies], fire, air, water, earth; and

this is impossible. Rather, what is its subject and its matter is the organic body, which cannot be organic before it possesses a soul, nor, when it has lost the soul, is it organic any more. For no body without soul is organic. So it is, for this reason, not possible to apprehend [sc. without reference to soul itself] what the soul is in. For it is [by] being along with [the soul] that [the body that soul is in] is organic, as lead [is lead by being] along with weight. RWS

(2) Alexander(?) *Quaest.* 1.17, 29,31-30,22

If some form of something is in a subject, it is either in prime matter as subject, or in the body of which it is the form, or in the body which changes into this.

[i] [30,2] But it is not possible for anything to be in primary matter as a subject, because such matter is not even a subject in actuality in the first place, but needs form in order to be in [real] existence. It is not possible for matter to be in [real] existence apart from form or form without matter; for each of them needs the other in order to be in actuality and in [real] existence. But that which something is in as in a subject must first itself be in actuality, without being assisted at all towards being that subject by what is in it as [its] subject.

[ii] [30,9] But neither is it possible for [form] to be in the body it is in, and of which it is the form, as being in a subject. For it is a part of this, if it is in accordance with it that it has its being.

[iii] [30,11] Nor yet will it be in the body which changes into this, for in the first place that does not even exist [any longer], but has passed away. For the change in form of bodies is passing-away.

[30,13] [So] it is not possible for any form that is something enmattered and [the form] *of* something to be in a subject. But if this [is so] and the soul too is the form of the animate body, it too itself will not be in a subject – for it will not be either [ii] in the living creature, since the soul is the principal part of the living creature, or [iii] in the body that changes into the animate body. For how could it be in what has passed away? The change into the animate body came about as passing-away for that [previous body]. [Moreover,] it is altogether impossible for soul to be in something which does not possess soul; and what is not in something [at all] in the first place will not be in it as a subject. And if the form is also a part of the body it is in, and will not be in something [as a subject] that it is not in [at all] in the first place, then soul will not be in any subject. RWS

(3) Alexander(?) *Quaest.* 1.8, 17,30-18,4

Well, the form is *not yet* in the matter, if [the matter] is taken by itself; and for this reason one would not enquire *how* that is in it which is not even in it in the first place. But since form of this sort *is* present in the compound substance (*ousia*), we must select something like this and conduct the

enquiry in relation to it. But, in whatever compound substance we take, the form which is in it is in it as a *part* of the compound. Even the soul is present as a part in the organic body it is in. But if [it is in what it is in] as a part, it will not be in it as in a subject – neither the soul nor any form generally. RWS

But we have seen under **3(w)** above that Porphyry argues that a quality like rationality can be seen to inhere as an accident even when it serves as the differentia of man, because it inheres as an accident in prime matter, *ap.* Simplicium *in Cat.* 48,11-34. Moreover Porphyry at *in Cat.* 78,6-7 assimilates the 'in' of inhering in a subject to the sense in which form is *in* (prime) matter. Admittedly, according to Simplicius' (report of Porphyry?) *in Cat.* 78,26-31, form is not in the relevant sense in composite matter. Much later, in the sixth-century Alexandrian school David (= Elias in *CAG*, but see the reascription by J.-P. Mahé, in I. Hadot, ed., *Simplicius' Commentaire sur les Catégories*, fasc. 1, Leiden 1990, 189-207) *in Cat.* 151,25-34, allows that form is an accident of matter.

(4) Porphyry *in Cat.* 78,6-7

Q. To which of these nine senses does being in something as a subject belong?

A. To the sense in which the form is in the matter. SS

(5) (Porphyry *ap.*?) Simplicium *in Cat.* 78,26-31

Indeed, the form does not belong to matter in the way that whiteness belongs to the composite. When something combines with something else to form a unity, in the sense in which form combines with matter to form the composite, the one does not reside in the other as in a subject. For 'in a subject' is that which is in something not as a part (1a24-5). For this reason, then, Aristotle included the two [i.e. matter and form] in his definition of the composite substance as its parts. FDH

(6) David [Elias in *CAG*] *in Cat.* 151,25-34

Another problem states that the form is in the matter and is not a part of the matter and is not separable from the matter (for when it separates, it perishes), and nonetheless the form (*eidos*) itself, both in the sense of species (*eidos*) and in the sense of specific form (*eidopoion*), is not an accident, but is substance. For it is the substance of what has been given form. To which we say that the form is an accident, for it occurs accidentally in the matter, since it is also separable from it. However, the form and the matter are [the] substance of the composite, as completers of it. Wherefore also they are called parts of it, not parts of one another. For nothing can be a part of what remains over and above itself. For nor can seven be part of the three over and above it which remains of the ten [from which it was taken]. JE

Reading

John Ellis, 'Alexander's defence of Aristotle's Categories', *Phronesis* 39, 1994, 69-89.

Frans de Haas, *John Philoponus' New Definition of Prime Matter*, Leiden 1997, 204-6.

3(z) Is matter in any category?

Pseudo-Alexander *in Metaph.* (whose date is disputed as between pre-Syrianus, i.e. fourth century at the latest, and up to the twelfth century) and Asclepius give different reasons why matter is not in any of the categories.

(1) pseudo-Alexander *in Metaph.* 464,21-6

Having said that matter is that which is delimited by quantities and the other things that he mentioned, Aristotle says 'by matter I mean that which by itself is neither something nor a quantity nor anything else' [*Metaph.* 7.3, 1029a20-21], that is, which is, considered just by itself, negating and stripping off the forms, none of the ten categories in which all being is delimited; for every being is reduced to these and is placed in them. AM

(2) Asclepius *in Metaph.* 380,31-5

For the subject (that is to say, the matter) is different from these according to the definition. 'For [Aristotle *Metaph.* 7.3, 1029a23] the other [categories] are predicated of the essence [substance], but it itself [is predicated] of the matter, as, for example, quantity and quality and the others are predicated of 'rational mortal animal', that is, of 'man', but 'man' is predicated of the matter; so that the ultimate subject *in itself* is not [in] any of the categories. PA

Philoponus, however, equates prime matter in *Contra Proclum* 11.5 with qualityless body and with substantial quantity, which is akin to the substantial quality discussed above under **3(w)**. Substantial qualities, as there remarked, and substantial quantities are treated by Philoponus as substances, so the effect is to place prime matter in the category of substance. Frans de Haas, 178-80, has rightly corrected my suggestion that Simplicius also treats matter as substance. The texts are translated and discussed in **Physics 17**.

Reading

Frans de Haas, *Philoponus' New Definition of Prime Matter*, Leiden 1997.

Richard Sorabji, *Matter, Space and Motion*, London & Ithaca, NY 1988, p. 14 and chs 2-3.

4. Predicables

The dialectical arguments discussed in Aristotle's *Topics* concern the four predicables which he lists in 1.4; the genus of a thing (which is taken at 1.4, 101b18-19 to include its differentiae), its definition, its distinctive properties (*idia*) and its accidents. Books 2 and 3 deal with dialectical arguments about accident, 4 and 5 with arguments about genus and distinctive property, 6 and 7, chs 1 to 3, with arguments about definition.

Porphyry's *Isagoge* (*Introduction*) changed the list of predicables, replacing definition by its components, genus and differentia, and adding species, to yield a list of five. He has been much criticised for adding species, but Evangeliou offers a defence. Porphyry also gives different senses of each of the five predicables and draws other distinctions, for example, 10,3-19, between differentiae dividing the genus and completing (*sumplêroun*) the species.

Aristotle *Topics* 1.5, 102b4-7 gives two definitions of accident, one by elimination (it is the remaining predicable which is not definition, nor distinctive property, nor genus), the other in terms of being able to hold good or not. The whiteness of snow might seem, on the most obvious interpretation (but see Ebert), not to fit the second requirement of being able not to hold good: how can it fail? Yet it does fit the eliminative account of being a predicable other than definition, distinctive property, or genus. Alexander therefore distinguishes it as an inseparable accident from separable accidents; and Porphyry's *Isagoge* follows this distinction.

Problems about differentia are discussed above under **3(w), (x)**.

(1) Aristotle *Topics* 1.4, 102b4-7

An accident is what is none of these, not definition, not peculiar property, not genus, but which belongs to a thing, and admits of belonging or not belonging to any one and the same thing. RRKS

(2) Alexander *in Top.* 49,6-17

For in the case of accidents, the second account offered does not seem to apply to every accident, whereas the first does; for one may inquire whether the account saying that an accident is what 'admits of belonging or not belonging to any one and the same thing' (*Topics* 102b6-7) captures the entire nature of accidents. For if this is what an accident is, then under what genus would we place those accidents which belong inseparably to a thing yet are neither in its essence (*ousia*) nor are peculiar properties of it, as e.g. snubness belongs to nose? For if these are not accidents, they will either be genera or differentiae or peculiar properties or definitions. But it is absurd to say that [inseparable accidents] belong to any of these kinds; therefore this would seem to be yet another natural kind of attribute besides the four mentioned. But if that is so, then this could not be the

number of kinds of problems and propositions either, but there would have to be some fifth kind of problems in which attributes of this sort are predicated. That is why in this respect the first account that was offered is superior. JMvO

(3) Porphyry *Isagoge* 12,24-13,5

An accident is what comes and goes without the destruction of the subject. It has two kinds: separable and inseparable. Sleeping is a separable accident, being black is an inseparable accident for raven and for Ethiopian, but the raven admits of being conceived of as white and the Ethiopian as losing his skin colour without destruction of the subject.

[13,3] It is also defined in one of these ways: an accident is what can either belong or not belong to the same subject; or, an accident is what is neither a genus, nor a differentia, nor a species, nor a distinctive property, but always subsists in a subject. TE

(4) Porphyry *Isagoge* 10,3-19

For instance, given that all the differentiae that belong by themselves to animal are: animate and sensate, rational and irrational, mortal and immortal, the differentia 'animate and sensate' is constitutive of the substance animal (for animal is animate, sensate substance), while the differentia 'mortal and immortal,' and the differentia 'rational and irrational' are divisive differentiae of animal (for we divide genera into species by means of them).

These divisive differentiae of the genera are completers and constitutive of the species. For animal is partitioned both by the differentia rational and irrational, and again by the differentia mortal and immortal. The differentiae mortal and rational are constitutive of man, while the differentiae rational and immortal are constitutive of god, and the differentiae irrational and mortal are constitutive of irrational animals. So too, since the differentia animate and inanimate and the differentia sensate and insensate are divisive of the highest substance, therefore the differentiae animate and sensate, taken together with substance, complete the genus animal, whereas the differentiae animate and insensate complete the genus plant. Thus while the same differentiae taken one way are constitutive and in another way are divisive, they are all called 'specific' differentiae. PVS

Reading

C. Evangeliou, 'Aristotle's doctrine of predicables and Porphyry's *Isagoge*', *Journal of the History of Philosophy* 23, 1985, 15-34.

Th. Ebert, 'Aristotelian accidents', *Oxford Studies in Ancient Philosophy* 16, 1998, 133-59.

A. de Libera, Introduction to *Porphyre, Isagoge*, trans. A. de Libera, A.-Ph. Segonds, Paris 1998.

5. Universals

5(a) The move away from transcendent universals

Aristotle's definition of universals at *Int.* 17a39-40 is that they are 'what is of a nature to be predicated of several things'. His teacher, Plato, in *Phaedo* 77-9 at first introduced a restricted class of universals as Forms or Ideas, namely relative universals like equal, double and beautiful, in which things participate only relatively, that is in certain relations, respects and comparisons. But eventually, he recognised a much wider class of universals as Forms or Ideas, even though there were still qualifications to the extreme principle that there is a Form corresponding to each common name. Perhaps we should not recognise Forms for negatives like non-Greek, or number other than 10,000. There were hesitations about the recognition in two texts of Forms for artefacts like bed and shuttle, and questions about Forms for such disgusting things as mud, hair and dirt.

That there are universals is not a very startling thesis on its own. But in calling these universals Forms or Ideas, Plato is commonly taken to have had a whole series of very controversial claims to make, of which I shall mention two in particular. The first is that Forms are more real than their instances, in the sense that they exist whether instances do or not. Plato may go further. His denial at *Timaeus* 37C-38B that we can say 'was' and 'will be' of the Forms was taken by Plotinus to mean that Forms are outside of time altogether. The second thesis is that Forms explain how instances come into being.

Regarding the first thesis, Aristotle's whole scheme of categories presented a rival view to Plato's so understood. Universals depend for their existence on primary substances, which for Aristotle in the *Categories* means, above all, naturally existing individuals like Socrates. For the universal Man to exist is merely for there to be individual men and for the universal Wisdom to exist is for there to be instances of wisdom in individual men. This is the implication of Aristotle's distinction in the *Categories* between things like Socrates, which are neither present in nor said of anything, and other items in the categories, which are present in or said of something, *Cat.* 1a20-b9; 2a11-b6. See above, **3(s)**. It fits with Aristotle's rival view of the order of priority that in his work on scientific method, the *Posterior Analytics*, he is ready to rewrite definitions of universal terms, like the definition of man as a rational animal, into syllogistic premisses about all *individual* men being rational animals. Cf. Boethius below.

In modern terms, one might bring out the truth in both rival views by considering the difference between a perfect answer to a mathematics examination and to a philosophy examination. The second idea does not seem even to make sense; the first does. And someone might say that there is such a thing as a perfect answer to a mathematics exam, even if it is not meant that there has ever been an actual instance. Part (only part) of what Plato wants to do is to treat justice like this. It is both a coherent idea, and an ideal to be striven for, whether or not it has ever been achieved. This too could be put by saying that there is such a thing as justice. But Aristotle, equally reasonably, thinks that to ask about the existence of justice is to ask about whether it has been achieved in actual instances at one or another time and place.

5(a) The move away from transcendent universals

Plato, however, goes much further with his second controversial thesis, that Forms *explain* how instances come into being, e.g. *Phaedo* 100B-102A. Aristotle complains, in *Metaphysics* 1, that coming into being requires a triggering cause of the type he calls 'efficient cause', and that the Forms, being changeless, are not qualified to act as triggers. Nor, on the face of it, do the Creator God or gods of Plato's *Timaeus* account, e.g., for particular changes nowadays, such as a thing's becoming beautiful. See **Physics 6(a)** and **8(f)**. With the help of intervening developments described there, however, the Neoplatonists are able to take it for granted that the Forms are causes. In fact, by the time of Simplicius, their causal role can be presented as more obvious than their role as universals. Simplicius *in Cat.* 82,35-83,20 does recognise them as one of three kinds of common feature (*koinon*), alongside the common feature residing in species of the same genus and the concept in the mind gained by Aristotelian abstraction. But Simplicius no longer thinks that Platonic Form gives us as clear a case of commonness as does the concept in the mind, because the Form is transcendent and therefore common only as a cause, not as a nature resident in things (83,10-12). Even that common nature may be so different as between mortal and immortal substance as not to provide as clear a case of commonness as the abstracted concept (83,12-14; cf. text (3)). Genus (*genos*) is treated, like Form, by Iamblichus, Proclus and Simplicius, as a transcendent cause or principle, e.g. Proclus *in Parm.* 650,19-34, translated in **5(h)** below, Simplicius *in Cat.* 53,9-12; 77,1-4; 80,2-7, although there is also the non-transcendent genus, Proclus *loc. cit.*, Simplicius 77,3-4; 80,5-7, Ammonius in *Isag.* 104,27-31, in **3(x)** above.

The history of the subject after Plato is for a long time a history of deflation of the status of universals. We have already seen that in Aristotle for a universal to exist is for there to be instances. But in *Posterior Analytics* 2.19, he speaks of universals (here *ta katholou*) in a different sense, but again a deflationary one, to mean universal concepts. An example would be the universal concept of an ox. This further helped to encourage the variety of interpretations later given to universals. A summary of interpretations given to Platonic Forms and to universals (the two subjects can become muddled) is provided by Syrianus *in Metaph.* 105,19-106,13.

The Stoics rejected the Platonic Forms as nothings. But it has been argued by Victor Caston, cited under **5(d)**, that the early Stoics thought that mental concepts (*ennoêmata*) could play the role of universals insofar as things fell under them (*hupopiptein*), while Chrysippus treated universals, genera and species, not as mental concepts, but as sayables (*lekta*), that is as the propositions or the predicative parts of propositions which serve as the contents of thoughts. Whether the Stoics gave one account of universals or both, either would be deflationary. Also deflationary is their analysis (**11(c)**) of 'Man is mortal' as 'if anything is a man, it is mortal'.

The Aristotelian, Alexander, was also deflationary, although it is disputed how far he intended to be. Sometimes he treats universals as depending on thought, sometimes as forms or natures which have the merely contingent property that they are shared by at least two instances. In the latter, he goes beyond Aristotle, who required only that universals be *of a nature* to be predicated of more than one thing. They do not have in fact to be so predicated. It is not clear whether, as with Aristotle, Alexander's criteria apply to two different ways of being universal, or whether, as I am inclined to think, he is combining his criteria, to say that there are universals only when our minds recognise the contingent feature of presence in at least two instances.

It might have been expected that the Neoplatonists would reject the deflationary accounts of universals, but that is not what happened. Rather, while insisting on Platonic Forms, and especially the genera or kinds (*genê*) of Plato's *Sophist*, Simplicius, we have seen, treats Forms as clearer examples of causes than of universals and Proclus views them as only with qualification universal, since (text

(3)) particulars do not share their definition with the Form, but only derive their definition from it. The Neoplatonists accept different accounts as applying to universals at different levels, and I shall distinguish seven kinds of universal which they recognise. Moreover, Porphyry, in his surviving accounts of universals, and Boethius in what he wrote about universals before his execution, tend to speak to beginners and not to concentrate on the Forms.

Porphyry in the *Isagoge* (*Introduction*) 1, 9-16 leaves it open whether universals exist in reality as too profound for his *Introduction*. He repeats at *in Cat.* 75,24-9 that the question of universals is too profound for a beginning student even to appreciate that talk of universals is talk not of reality (*huparxis*), but of how things are conceived (*epinoia*). The thing which is said to be too hard to understand is not universals as Platonic Forms, and some (e.g. Sten Ebbesen, cited under **5(f)** below) have concluded that he thought of universals just as concepts. I think he may rather, like Alexander, be saying that there are universals only when the contingent feature, existing in our minds, of there being at least two alike is applicable to forms or natures. He certainly talks, like Alexander, of universality as an accident, *in Cat.* 81,16-20, translated in **5(e)**. Boethius comments on the passage of Porphyry's *Isagoge* in a text translated in **5(g)** below. He gives much the same account of universals as Porphyry and explicitly claims to be following Alexander in doing so. Writing in Latin, he had a particular influence on the Latin Middle Ages. Consequently, it was this deflationary account of universals that had more influence than the theory of qualifiedly universal Forms on the subsequent understanding of universals in the West. Elsewhere Boethius treats man (**5(g)**) as an aggregate of individual men.

In what follows, I shall discuss the Forms a little further and then the full range of seven types of universal recognised in Neoplatonism, before passing to the deflationary strategies of the Stoics and Alexander and the transmission of them by Porphyry and Boethius.

(1) Aristotle *On Interpretation* 17a39-40

By 'universal (*katholou*)' I mean what is of a nature to be predicated of several things and by 'particular (*kath' hekaston*)' what is not. RRKS

(2) Simplicius *in Cat.* 82,35-83,20

Perhaps one should take 'common feature' (*koinon*) in three ways,

[1] The first, the one that transcends the individuals, being the cause of the common nature (*koinotês*) in them in virtue of its single nature, as it is also the cause of the difference [between them] in virtue of its pre-encompassing many species. For example, in virtue of the single nature of animal the first animal, viz. the Animal-Itself, endows all animals *qua* animals with the common nature they share, and in virtue of its pre-encompassing the different species it establishes the different species of animals.

[2] [83,6] The second common feature is the one that the different species are endowed with by their common cause and which resides in them, like the one in each animal.

[3] [83,8] The third is the common feature established in our thoughts by means of abstraction (*ex aphaireseôs*), which is later-generated (*hustero-*

genes) and most of all admits of the notion of the non-differentiated common feature.

[*ad* 1] [83,10] For the common cause transcends its effects and is something different from them in all respects. It is common as a cause, but not as a common nature (*koinê phusis*).

[*ad* 2] [83,12] The common nature (*koinotês*) which completes the individuals has difference together with the common feature. For there is nothing merely common in mortal and immortal substance, but the common feature is differentiated and the difference is shared in common.

[*ad* 3] [83,14] Thus only the result of abstraction which we leave behind when we strip away the differences contains the notion of the common feature *qua* common. Perhaps Alexander has this in mind when he thinks that it is posterior to individuals. Nevertheless, he does not preserve consistency with his own account, when he says that the individuals are constituted out of the common feature and the differences, unless perhaps he considers their constitution, too, according to the manner of thought which yields the definition and exposes the common feature. FDH

(3) Proclus *in Parm.* 880,3-11 Cousin

From this we should infer that the community between the one Form and its many instances should not be in name only [sc. with no common meaning], lest we should have to seek next, because of the common name, for some single element common to the one and the many, as unity is the common element in plurality; but that the single Form must not be synonymous with [have the same definition as] those of the particulars coming under it, or we shall have to ask what is the common element present in both kinds of being that are covered by the same term. But rather, as has often been said, the common element in the many instances is that of being derived from (*aph' henos*) and having reference to a single source (*pros hen*). GM, JD

Reading

A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, 62-85.

G.E.L. Owen, 'Logic and metaphysics in some early work or Aristotle', in I. Düring, G.E.L. Owen, eds, *Aristotle and Plato in the Mid-Fourth Century*, 163-90, repr. in his *Logic, Science and Dialectic*, ed. M. Nussbaum, London & Ithaca, NY 1986, 180-99.

5(b) Forms defended from the Third Man Argument

Aristotle supplied objections to his teacher's theory of Forms or Ideas in *Metaphysics* 1. One objection from here, their lack of causal power, is considered in **Physics 6(a)**. Further objections were included in Aristotle's *On Ideas*, partly preserved by Alexander *in Metaph.* 79,3-85,3, and yet others from later periods are recorded by the commentators. But the most notorious difficulty was raised by Plato against himself in his *Parmenides* 131E-132B. It came to be called the Third Man Argu-

ment, and a version was formulated by Aristotle in his *On Ideas*. The problem starts from the assumption that wherever things have the same property, say beauty, they must have it *in virtue of* a Platonic Form of Beauty (here the Form plays its explanatory or causal role), and furthermore that that Form must be *distinct* from themselves. The objection arises if the Form of Beauty itself has to be beautiful. For then another *distinct* Form of Beauty will be needed for explaining the beauty of all the things previously mentioned, and a regress will have started. The following is Aristotle's version of the Third Man objection to Plato, as reported by Alexander.

(1) Aristotle *On Ideas*, reported by Alexander *in Metaph.* 84,22-85,5

If what is predicated truly of many things is also something else apart from the things of which it is predicated, separated from them – for this is what those positing the Ideas think they demonstrate: according to this, there is a man-by-itself because man is predicated truly of the many particular men and is something other than the particular men – but if that is so, there will be a third man.

For if what is predicated is something other than the entities of which it is predicated and has the character of a substance on its own, and if man is predicated of both the particulars and the Idea, there will be a third man besides the particular and the Idea. Likewise, there will be a fourth man predicated of the [third] and of the [original] Idea, a fifth, and so on to infinity.

The present argument [the one from Aristotle] is the same as the first [the one presented by Eudemus and others], and follows because [the Platonists] held that similar things are similar by participation in some same thing. For particular men and the Ideas are similar. RWS

What Proclus and other Neoplatonists point out, for example in Proclus *in Parm.* 880,3-11, just translated, is that, on their interpretation, it is not exactly the same property that is shared by the transcendent Form and the distributed common natures. For, as explained in the previous section, the latter possess the properties of the Form only derivatively, *pros hen* or *aph' henos*. So the Third Man Regress is avoided. For higher causes bearing properties in a primary way, effects derivatively, see also **Physics 6(f)**.

The deflationary accounts of universals in Aristotle, the Stoics and Alexander, encounter no such problem of regress, since even in the few cases where their universals happen to be predicated of themselves (the concept of mental is mental), their universals do not play the explanatory role required of Forms.

Reading

Gail Fine, *On Ideas, Aristotle's Criticism of Plato's Theory of Forms*, Oxford 1993.
A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, 85.
G.E.L. Owen, 'Logic and metaphysics in some early work or Aristotle', in I. Düring, G.E.L. Owen, eds, *Aristotle and Plato in the Mid-Fourth Century*, 163-190, repr. in his *Logic, Science and Dialectic*, ed. M. Nussbaum, London & Ithaca, NY 1986, 180-99.

5(c) Seven kinds of universal

We have seen in **5(a)** that Simplicius *in Cat.* 82,35-83,20 recognises three types of common feature (*koinon*). I have stressed his warning that Forms are not common natures (*koinai phuseis*), but common only as causes. So it is something of a distortion to call them universals. But 'universal' is the term more familiar to us, so I shall use it in the broad sense of Simplicius' common features (*koina*). In a sufficiently broad sense, we can recognise not three, but seven, kinds that were recognised by the Neoplatonist commentators. Their general strategy, while insisting on Forms, is a harmonising one of recognising as well many of the other entities that had at one time or another been introduced as universals. There are:

(1) Transcendent Platonic universals in the intelligible world.

(2) Platonic Forms as creative *logoi* in the mind of God which create the sensible universe. This idea appears already in the first to second centuries AD in Middle Platonism, from which all but one of the quotations under (2) below are taken. But the idea is also mentioned by Hermeias *in Phaedr.* 171,8-25 and by Ammonius *in Isag.* 42,16-17, translated in other sections of **5(c)**. And Asclepius' commentary from the voice of Ammonius seeks to harmonise Aristotle with Plato in claiming that at least he recognised Forms as *logoi* in the mind of God. The idea of universals as creative applies not only to (2), but also to (1), for, as seen under **3(r)**, the intelligible genera are thought of as creating the intelligible species, 6.2 [43] 19 (1-11). This creation of species is stressed again below by Proclus *in Parm.* 650,18-34. And of course Forms are presented as causes of things in the sensible world, equally when their role as universals is not being stressed, as e.g. under **3(m)**.

(3) Aristotelian enmattered forms were viewed by the Neoplatonists as universals, although the Aristotelian Alexander sometimes appears to understand them as not being universal, except as viewed separately from matter and material circumstances, as will be explained under **5(e)**. Simplicius instead views them as universal or 'common' natures residing in things, and calls them 'distributed' (*katatetagmena*), meaning that they are distributed among instances, as explained by A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, 65-6; cf. Sten Ebbesen, *Commentators and Commentaries on Aristotle's Sophistici Elenchi, CLCAG* (*Corpus Latinum Commentariorum in Aristotelem Graecorum*) 7.1, p. 148.

The clearest passage is the threefold distinction of 'common' features, already cited from Simplicius *in Cat.* 82,35-83,20 under **5(a)**. It distinguishes the Aristotelian universals in things from the Platonic Form which is their cause and from the Aristotelian concept which is derived from them and resides not in things, but in our minds. The same threefold distinction among universals had already been made by Simplicius at *in Cat.* 69,19-71,2, and earlier by Proclus *in Eucl. 1*, 50,16-51,13. Ammonius applies to the threefold distinction the terminology of what is *before* the many (the Forms), *in* the many (the Aristotelian universal form) and *after* the many (the Aristotelian concept).

Simplicius repeats the question raised by Porphyry (see **5(f)**), how Aristotle can in his *Categories* ch. 5 think of Socrates as a primary substance, and of the universals human, animal, as secondary substances, which seems the reverse of the Platonic prioritisation of universals. Simplicius records six attempts to answer at *in Cat.* 84,12-85,7, including Porphyry's at 84,20-3 and possibly 24-8. He himself accepts Aristotle's verdict, because these are Aristotelian universals residing in things, not the Platonic transcendent Forms. But he rejects Alexander's view that the individual is prior *in nature* to universals, *in Cat.* 85,1-9.

(4) Aristotelian universal concepts in the mind, on which see **Psychology 5(b)**, are empirically assembled (*sunageirein, sunagein, episunagein, sunathroizein,*

sullegein) from the perception of a number of particulars. This idea is based on Aristotle *Posterior Analytics* 2.19, of which my own view is sketched in *Animal Minds and Human Morals*, London & Ithaca, NY 1993, 30-5.

(5) Platonic universal concepts which have been in the mind from before the soul's present embodiment and can be recollected (*anamnêsis*).

In listing both (4) and (5), the Neoplatonists thus recognise, but do not necessarily endorse, both rival theories of universal concepts, that of Plato (see especially *Phaedo* 72E-78B) and that of Aristotle (*Posterior Analytics* 2.19). Aristotle's view of the soul as a unified set of life-manifesting capacities did not allow the soul to pre-exist its present embodiment. Accordingly, he substituted for Plato's pre-nate concepts the idea, as I interpret it in *Animal Minds and Human Morals*, 30-5, that a rudimentary universal concept of, say, an ox is no more than many memories of oxen. A scientific concept of an ox requires in addition the spotting (*nous*) of what differentiates oxen from other animals and explains their further characteristics.

(6) Aristotelian abstracted concepts and their relation in geometry to Platonic concepts. Geometry involves extra processes. According to Aristotle, e.g. *Physics* 2.2, geometry abstracts (the technical term, not used here, is *aphairesis*) geometrical shapes by ignoring the changeable matter in which they are embedded. The natural scientist by contrast thinks of the matter of the stone, but even he, according to *On the Soul* 3.8, 431b28-432a1, cannot *receive* the matter in his mind. That is why, according to Alexander, all use of concepts even outside mathematics involves separating (*khôrizein*) forms of type (3) from their matter, *DA* 87,24-5; Alexander(?) *Mantissa* 108,19-24, both translated in **Psychology 3(g)**. This idea that all use of concepts involves abstraction is reflected in other authors translated below and in **12(b)**, e.g. Simplicius *in Cat.* 69,29-71,2; 82,35-83,20; 'Simplicius' *in DA* 124,10-14. But Philoponus *in DA* 57,28-58,4, 'Simplicius' *in DA* 277,1-6; 277,30-278,6, translated in **12(a)** and **12(b)**, preserve Aristotle's idea that mathematical concepts are the only ones abstracted in the further sense.

We shall see below in **9** that Philoponus says induction from a limited number of instances is possible only because we have the Platonic concepts in us, *in DA* 4,4-32, and Proclus thinks that this is what makes possible the discovery of definitions, *in Parm.* 981,5-9; 24-41. The point about induction is hinted at in **5(c)** by Olympiodorus *on Phaedo*, Lecture 12.1, who talks about the need for forms within, if one is to pass from one thing to another, and by Simplicius *in Phys.* 1075,4-20, who speaks of the difficulty of assembling universals, given that particulars are infinitely many.

(7) Geometrical universals extended and pluralised in the imagination. The later Neoplatonists prefer a view they ascribe to the Pythagoreans, that we have in our mind universal geometrical concepts of a Platonic kind, which are unextended, but the geometer needs them to be extended and pluralised in *phantasia*, the imagination, before he can think about the relations of the lines, planes and solids he is concerned with. Both the Aristotelian and Pythagorean view are construed as locating in the imagination the figures the geometer uses. What is relevant to the subject of universals is that the shapes extended and pluralised in the imagination are sometimes spoken of as themselves being universals, as illustrated under (7) below, Proclus *in Eucl. 1* 51,13-20; 53,18-55,13, although the shapes which enter the imagination by the Aristotelian route are particular, Syrianus *in Metaph.* 96,6-12. The universals in the imagination are described as 'distributed' (*katatetagmena*), in other words distributed in instances, not transcendent.

The initial passages will illustrate universals (1), (3) and (4); the next (4) and (5); the next (6), the next (7) and the last (2).

Reading

Richard Sorabji, 'Universals transformed', in Arindam Chakrabarti and Peter Strawson, eds, *Universals, Qualities, Concepts*, forthcoming.

(i) Universals (1), (3), (4): Platonic Forms before things, Aristotelian universals in things, Aristotelian concepts after things

The Neoplatonists regularly recognise a threefold distinction between Forms, Aristotelian universals in sensible particulars and Aristotelian universal concepts in the mind, which are 'later-generated' (see below). Some technical terminology is used by Ammonius and in part traced back to Porphyry. Forms are before (*pro*) the many, Aristotelian universals in (*en*) the many and Aristotelian concepts after (*epi, meta)* the many. This terminology got translated into Latin and persisted into the Latin Middle Ages. The next six texts from Proclus, Ammonius (citing Porphyry), Philoponus and Simplicius recognise all three. Cf. Ammonius *in Isag.* at **3(x)**(3) above.

Another technical description of the transcendent Form is that it is 'unallocated' (not *katatetagmenon*), in other words, it is not distributed in instances (see Lloyd *Anatomy* 64-7), since it rather functions as a cause. (Other translations, besides 'distributed', are 'allocated', 'ranked', Ebbesen; 'related', Dillon; 'co-ordinated', De Haas, Chase). It is 'imparticipable', for similar reasons. And it is also called a 'whole' (Lloyd *Anatomy* 67; 73; 81-5).

Simplicius has an interesting suggestion at *in Cat.* 69,19-71,2 that one does not find either among the Forms, or among the universals in things, plain animal, without the differentiations which divide it into elephants and ostriches. The undifferentiated animal is arrived at only by an Aristotelian process of abstraction. But in accordance with his aim stated in his introduction to the commentary 7,23-32, translated in **2(a)** above, he does not blame Aristotle for what he neglects, but congratulates him for recognising that undifferentiated animal lacks full being, and is only something abstracted.

(1) Simplicius *in Cat.* 82,35-83,20, translated under **5(a)** above

(2) Simplicius *in Cat.* 69,19-71,2

1. Some abolish the nature of common features (*koina*), and hold that they exist in individuals only without envisaging them anywhere as being in themselves. They are right with respect to the distributed (*katatetagmenê*) common nature (*koinotês*), but one also has to keep in mind the transcendent commonality from which the distributed one derives. For the transcendent is prior to the distributed and that which is through itself is prior to that which is through something else.

[69,24] 2. So if this is transcendent and the cause of everything that comes after it, it should not be regarded in its common nature (*koinotês*) only. For instance, if the cause of all animals, i.e. of men, horses etc., whether celestial, aerial, watery or earthly, were regarded in respect of the nature of animal only, it would only produce the common nature of animals. But since it also produces all species of animal, it is the pre-existing collected unity not only of the common nature but also of the different species, and it is everything before everything, and it produces the common nature and the differentiae according to its superiority, which transcends both.

[69,32] 3. Perhaps such a common nature, as we conceive it, viz. as something undifferentiated, is not generally in the products. For when we call both soul and body substance, what is it both in the soul and in the body that is common and undifferentiated? It is clear, too, that the common feature is differentiated when it is established together with the differentiae (*diaphorai*), so as to become commensurate with the differentiae. For the substance of soul can never be intertwined with the differentiae of body. However, also the difference (*to diaphoron*) is rendered common in accordance with the unification induced in everything by the One, lest everything produced by the One be dispersed.

[70,8] 4. But although we participate in much that is contaminated and dispersed we abstract (*exairein*) by our thoughts the common nature in itself as something undifferentiated which is neither in the individuals – for it is differentiated – nor in the things before the individuals – for those are not merely common, but they pre-embrace the difference in a different nature which is truly unknowable to us, but which is the cause of this differentiated common nature and the differentiation rendered common: it produces both at the same time.

[70,14] 5. So when Socrates in his dialogues seems to bring out the beautiful in everything and the equal in everything, the dialectical method distinguishes not that the beautiful in-the-many is altogether undifferentiated, but that up to then our thought was contaminated and not capable of separating the common from the particular, and then it [the dialectical method] brings the distinct thoughts into unity instead of confusion (for this is the goal of dialectic, as Socrates made clear in the *Republic* too).

[70,20] 6. Let us not, then, rebuke Plato or Plato's teacher Socrates for everywhere indicating the common Forms (*eidê*) in participation and prior to participation in a dialectical way. For in this way one must make people who recognise only the differences between individuals remember the common nature or the common cause in the individuals.

[70,25] 7. Let us not mock Aristotle either for being ignorant of the common natures (*koinê phusis*) and pre-existing causes (he who said that no demonstration would occur at all without a universal premiss!), but let us rather congratulate him for the amazing fact that he recognised that these entirely undifferentiated common features are not in themselves in existence among beings, but that we are the ones who establish them in themselves after abstracting (*aphairein*) them in our thoughts.

[70,30] 8. But let us not say more than is due; this was said because out of rivalry the most famous philosophers quarrel in vain. FDH

(3) Proclus *in Eucl. 1*, 50,16-51,9

If we must formulate a theory in agreement both with the facts themselves and with this teaching of Plato's, let us proceed by making the following distinctions. Every universal, that is, every One that includes a many, either appears (*phantazesthai*) in (*en*) the particulars and has its existence

in them and is inseparable from them, holding its place in their ranks, moving as they move and remaining motionless when they are stationary; or exists prior to (*pro*) the many and produces plurality by offering its appearances (*emphaseis*) to the many instances, itself ranged indivisibly above them but enabling these derivatives to share in its nature in a variety of ways; or is formed from (*apo*) particulars by thought (*epinoia*) and has existence as an after-effect (*epigennêmatikê*), a later-born (*husterogenôs*) addition to the many. According to these three modes of being, I think we shall find that some universals are prior to their instances, some are in their instances, and some are constituted by virtue of being related to them as their predicate (*kata tên skhesin kai katêgorian*). GM

(4) Ammonius *in Isag.* 41,17-20

Now, the picture in the signet ring is said to be before-the-many (*pro tôn pollôn*), the one in the bits of wax in-the-many (*en tois pollois*), and the one in the mind of the person who copies it for himself is called after-the-many (*epi tois pollois*) and later-generated (*husterogenês*). FDH

(5) Ammonius *in Isag.* 42,10-21

When we recognise that the individual human beings all possess the same form of human being, as the person does who comes along later on and sees the bits of wax, we replicate it for ourselves in our mind, and this is called after (*epi*)-the-many or subsequent-on (*meta*)-the-many and later-generated.

These are separate from bodies – for they do not exist in a body, but in a soul. But they are not separate without qualification, because they cannot be apprehended in themselves as Plato supposes the Forms before-the-many can be. For he does not want them to be mere thoughts of the Demiurge, but in all respects intelligible substances at which the Demiurge gazes as archetypes as he creates their images down here.

So [Porphyry, *Isag.* 1,9-16, translated in **5(f)** below] says that it is worth investigating, whether they are incorporeal and separate like the things existing outside the Demiurge, or inseparable like the things in-the-many, or after the sensibles, i.e. after-the-many. FDH

(6) Philoponus(?) *in An. Post. 2*, 435,28-30

Since the universal is of three kinds, that before (*pro*) the many, which is what Plato's Forms are, that based on (*epi*) the many, and that in (*en*) the many ... RRKS

Reading

A.C. Lloyd, *Form and Universal in Aristotle*, Liverpool 1981, 62-76.
Notes to Simplicius *in Cat.* 69-71 by Michael Chase; 82-5 by Frans de Haas in the series *Ancient Commentators on Aristotle.*

(ii) Universals (4), (5): Aristotelian assembled concepts and Platonic recollected concepts

Aristotle's universal concepts in the mind, (4), are listed in the first six texts of **5(c)**, and expounded without demur in Philoponus *in Phys.* 12,24-8 and in the commentaries on Aristotle's *Posterior Analytics* 2.19 by Themistius, 'Philoponus' and Eustratius (translations in **Psychology 5(b)**(3), (5), (6) and (7)). The idea is also reflected in the commentaries on Aristotle's *On the Soul* by Themistius and 'Philoponus' (translations in **Psychology 3(g)**(12) and **5(c)**(1)) and below in Hermeias *in Phaedr.* 171,8-25.

Some of those who appear to accept Aristotle's empirically gained concepts also accept Plato's innate ones. This seems true of Hermeias, *loc. cit.*, and of Philoponus, who may be accepting Plato's concepts at *in DA* 4,30-2, translated in **9(b)**(2) below, and who ascribes a version of them to Aristotle at *in de Intellectu* Verbeke (*CLCAG*) 38,99-40,43, translated in **Psychology 5(c)**(2). In addition, the idea that we have both kinds of *logos*, opiniative (*doxastikos*) empirically gained in Aristotle's manner and scientific (*epistêmonikos*) due to recollection, is found earlier, in Middle Platonism in Alcinous *Didaskalikos* ch. 4, translated in **Psychology 1(a)**. And the idea of opiniative reason is still found in the late Neoplatonist, Priscian, *Metaphrasis in Theophrastum* 19,9-13, also translated in **Psychology 1(a)**(8).

But several others reject the empirically gained Aristotelian concepts, giving the impression that the classification which included them may not always have endorsed them. They are rejected by Syrianus *in Metaph.* 12,28-13,3; 95,13-17 and 29-36; Proclus *in Eucl. I* 12,9-13,27, translated in **12(b)** below, and criticised by Simplicius *in Phys.* and Olympiodorus *On Phaedo*, **5(c)** (12), (13) below. Cf. Proclus at **9(b)**(1) below and his *in Parm.* more generally.

Some commentators go the other way and ascribe to Aristotle belief in Plato's pre-nate concepts, as well as in his own empirically gained ones. This is reported by 'Philoponus' about Iamblichus, with a similar view ascribed to Plutarch of Athens at *in DA* 533,25-35; 520,1-12, translated in **Psychology 3(i)**(3) and **5(c)**(1). And though 'Philoponus' objects, the ascription is endorsed and elaborated by Philoponus, *in de Intellectu* Verbeke (*CLCAG*) 38,99-40,43, translated in **Psychology 5(c)**(13).

In the passage from Aristotle (*Posterior Analytics* 2.19), I take the word 'or' to mean 'i.e.', not 'or rather', as Eustratius supposes. (For him and Philoponus(?), who disagree in different ways with this interpretation, see **Psychology 5(b)**). On this interpretation, Aristotle is quite reasonably *identifying* the first rudimentary universal concept in the soul, in an empiricist way, with experience, that is, with many memories. In other words, the rudimentary concept of a lunar eclipse (his example in *An. Post.* 2.8) just is many memories of lunar eclipses, so no Platonic recollection of lunar eclipse from a previous life is needed. The 'or rather' alternative would leave a gap in the discussion. Aristotle has offered to tell us how concepts are formed, and he tells us how we reach the stage of experience, which is many memories. He would, on the 'or rather' interpretation then leap to saying 'or rather we reach the first universal', while omitting to explain how we do so.

In the following lines, 100a16-b1, translated in **Psychology 5(b)**(1), Aristotle again stresses the importance of perception by allowing it to grasp universals.

Of course, Aristotle wants to go beyond the rudimentary universal, and tell us how we reach *scientific* concepts, and for this memories are not enough: he is not an empiricist about that. The scientific concept of lunar eclipse recognises that it is due to the earth's shadow, and later in our chapter Aristotle says that scientific concepts like that can only be acquired by *nous*, which I understand as meaning by *spotting* it intellectually. This too seems to me true to life. Admittedly, it does not tell us *how* we do the spotting, but then I think there is no answer to that question.

Some ancient commentators elaborate Aristotle's reference to *nous* into a theory of three different kinds of intellect playing three different roles in concept formation. See Psychology **3(g)**(4)-(13).

It is sometimes asked whether Aristotle is discussing universal concepts in this chapter, or universal propositions, but I think that here the contrast is a false one. For to grasp the concept of lunar eclipse is to grasp the proposition that it is a certain kind of lunar loss of light. Aristotle is not, however, as Themistius supposes, *in An. Post.* 63,15, discussing all scientific generalisations, but only the definitions from which science starts.

(7) Aristotle *Posterior Analytics* 2.19, 100a3-14

Now memory (*mnêmê*) results from perception (*aisthêsis*), as we say, and experience (*empeiria*) [results] from many memories of the same thing, since memories that are many in number constitute a single experience. From experience, or (*ê*) from the whole universal (*katholou*) when it has become stable in the soul – the one beside the many, whatever is one identical thing in them all – [results] a first principle (*arkhê*) of art (*tekhnê*) and scientific understanding (*epistêmê*); of art if [the subject in question] is in the realm of coming to be, and of scientific understanding if it is in the realm of what is. So the states are not [innate] in (*enuparkhein*) [animals] in a determinate form nor do they come from higher cognitive states (*gnôstikôteros*), but from perception, as happens when a rout has occurred in a battle, and when one man has stopped, another stops and then another, until it reaches the original position (*arkhê*). The soul is the kind of thing that can undergo this. RMcK

(8) Themistius *in An. Post.* 64,24-65,2

At the start, our first perception posits the premisses immediately, but only after [perception] has already progressed far does the mind conclude the universal from them. But why the span of time? Because it is our nature to collect (*sunageirein*) the universal through time. It passes unnoticed that this very mode of thought is induction and people with less experience (*apeiroteroi*) believe [the mind] receives the concepts (*ennoiai*) from nature and not from itself. FDH

(9) Porphyry *On Ptolemy's Harmonics* 14,32-15,6 Düring

For perception is a material and passive criterion, while reason (*logos*) is a formal one and the cause from which motion and being come; for that reason sensation, in judging (*krinein*) by its affection and materially apprehends things approximately and to the extent that the sense object makes its mark upon it, and signals no more than this, while reason (*logos*), in operating at formal and immaterial level, is found to have preconceived (*proeilêphôs*) the whole of what is being judged and virtually to possess accurately within itself the form (*eidos*) of what is investigated – more

accurately than when it is observed among sensible objects. And so reason actually supplies what is missing from it [the form as supplied by the senses] and corrects what is not quite right; but it would not be able to do this if it did not have prior possession of it. HT

(10) Hermeias *in Phaedr.* 171,8-25 Couvreur

'For the human being must be capable of' (249B6-7) collecting (*sun-athroizein*) by means of reason the later-generated (*husterogenê*) universal (*katholou*) from the common traits distributed in individuals (*apo tôn en tois kathekasta katatetagmenôn koinotêtôn*), i.e. from what is common in Socrates and Plato and the like – for this is what 'to understand' (*sunienai*, 249B7) means. From these [the human being must] project (*proballein*) the universals (*katholou*) that are present in the soul in virtue of its essence, through which as images he will recollect the Forms in the intelligible realm. The animal soul cannot do this, for it is not capable, upon seeing this, that and yet another horse, of collecting in reason the later-generated universal 'horse'. FDH

[16] This is so because [the animal soul] does not even possess in virtue of its essence and as innate (*sumphuês*) the concepts (*logoi*) and the substantial universals (*katholou*) of these things. Consequently only the human and the humans' rational soul can do this, viz. collect from this and that equal thing which are not precisely equal (for what enmattered thing is precise?) the later-generated universal and precise concept of equal. From these it provides to hand (*prokheirizesthai*) and projects (*proballein*) the universal concepts in virtue of its essence.

Then [the human's rational soul] from these images (*eikones* [the later-generated universals]) is reminded (*anamimnêskesthai*) of all the forms (*eidê*) in the Demiurge's Intellect. For neither the soul itself nor things here in the world of coming to be would possess the forms, if the Demiurge's Intellect had not had them long before, always fixed the same way and having real being. RRKS

(11) Philoponus *in Phys.* 12,24-28

It is reason that collects (*sullegein*) the individuals known to perception and calls the bundle (*athroisma*) of all of them, or simply what is common to them all, the 'genus'. So that the knowledge of the genus that is in the many is posterior for us as well, and for this reason also less clear; for we apprehend individuals more readily than we apprehend universals. CO

(12) Simplicius *in Phys.* 1075,4-20

This, then, is the way Alexander explained [it], wishing the universal and the cognition of the universal to be brought together (*sunagesthai*) from the particulars, and he said that it was stated that 'it somehow knows the particulars through the universal [knowledge]' as a sign that the cognition

of the universal is gathered (*athroizesthai*) by means of the particulars, since the universal knowledge is of each of the things [falling] under the universal (and it has been gathered from these), for the particulars are comprehended in the knowledge of the universal, on the grounds that that [knowledge] comes to be from them and in dependence on them.

[1075,10] On the other hand, if it is not possible for universals to be assembled (*sunagesthai*) from particulars, since those are infinite, nor for the cognition in the sensory and imaginative [parts] to be capable of bringing scientific understanding into existence in the intellect, [this cognition] being much inferior to [scientific understanding, which is] superior, one must rather, I think, explain in a simpler and truer way what has been stated by Aristotle. The intellect always has knowledge of the universals in actuality (whether ready to hand (*prokheiron*) or not), but of the particulars [only] potentially. Whenever perception strikes the particular, at that time, then, the intellect actually knows (*ginôskei*) the particulars through the universal. 'For an individual human being is a human being too', as [Aristotle] himself stated elsewhere [cf. *An. Post.* 2.19, 100a16-b1]. For this reason too he added the 'somehow' (*pôs* [247b6. It is not clear whether Simplicius here read Aristotle as saying 'particulars are somehow known by the universal' or 'the universal ... somehow ... by particulars']), because the cognition of the universal is not on the same level as that of the particular; rather, the particular is known (*ginôsketai*) 'through the universal [knowledge]' because the particular is encompassed by the universal. CH

(13) Olympiodorus *on Phaedo*, Lecture 12.1, lines 9-25 Westerink

The second argument is that the approximate must be preceded by the exact (*akribes*: precise), and the vague and inaccurate by the well-defined, and the forms (*eidê*) in this world are not exact (precise): two magnitudes that are equal will remain so when a quantity the size of a grain of sand is added or removed [74b7-c6]. Since, however, these arguments prove the existence of Ideas (*ideai*) no less than that of concepts (*logoi*) in the soul, let us give some additional proof of the existence of such concepts in the soul. If the human soul distinguishes between forms (*eidê*) in this world and calls the one more beautiful, the other less so, it evidently pronounces these judgements by referring to a certain standard and a certain form; it could not distinguish between things of which it does not have the notions within itself. We should not believe the Peripatos [Aristotle, *An. Post.* 2.19, 99b35] when it declares that we discern these things by means of something called the capacity of judgement (*kritikê*): the human soul does not act by mere natural instinct (*phusikôs*), as a spider makes its web. Besides, if it makes additions and passes from one thing to another, it must evidently have certain forms within itself, otherwise there would be no question of passing on to other things, or of supplying deficiencies, without such forms; a man who sees Socrates' portrait without having seen Socrates before cannot go beyond the portrait. Lastly, if the soul aspires to the knowledge of exact

forms and its aspiration is not in vain, the cause of this longing can only be the presence in it of forms, which it tries to learn. LGW

Reading

Ian Mueller, 'Aristotle's doctrine of abstraction in the commentators', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990.

Richard Sorabji, *Animal Minds and Human Morals*, London & Ithaca, NY 1993, 30-5.

(iii) Universals (6): Aristotelian abstracted concepts in mathematics vs. Platonic concepts

The main account of geometrical concepts is given in **12(a)** and **(b)** below. Aristotle thinks that mathematical universal concepts have to undergo extra processes of being abstracted from material circumstances. Aristotle, as explained above in the introduction to **5(c)**, denies that the natural scientist ignores matter in that way, as recognised by 'Simplicius' *in DA* 277,1-6; 277,30-278,6; Philoponus *in DA* 57,28-58,4, translated in **12(a)** and **(b)**. But even the natural scientist cannot receive matter in his mind, but only form (Aristotle *On the Soul* 3.8, 431b28-432a1), and the commentators often call this too separation or abstraction of form.

Concepts are located in the mind, but Alexander regards geometrical figures, though dependent on the abstractive process, as not located only, like concepts, in the mind. Like the equator, the figures may be located as well in physical objects, even though they are mind-dependent.

The rival Platonic view of recollected concepts being projected into the imagination and studied there is distinguished from abstraction by 'Simplicius' *in DA* 233,7-19; 277,1-6; 277,30-278,6. It is treated as preferable to abstraction by Syrianus *in Metaph.* 12,28-13,3; 95,13-17 and 29-36; Proclus *in Eucl. I* 12,9-13,27; 121,2-7, all translated in **12(b)** below, and by Olympiodorus *on Phaedo*, Lecture 12.1, lines 9-25, in the last text to be translated above.

In the next section, I shall consider what happens to the Neoplatonists' recollected concepts, when they get projected and spread out as geometrical figures in the imagination. As they exist in the intellect, however, they are not spread out, but are indivisible.

Although I am speaking of Platonic *concepts*, the word normally used for them in the following passages and in two earlier passages in **5(c)** is *logoi*, which is more literally rendered '[rational] principles', since it is sometimes compared with [rational] principles in nature which are not concepts, and is sometimes contrasted with Aristotelian *epinoiai*, which are concepts. But the theory is more intelligible if the reader is reminded that in this context the Platonic principles are treated as concepts, so except in the tricky passages mentioned, where I shall indicate both ways of translating, I shall use the translation 'concepts', but indicate at least the first occurrence in each passage by also transliterating *logoi*.

Syrianus, in the passage to be quoted here, thinks that universals, whether mathematical or not, reside in the concepts or *logoi*. He says that Aristotle wrongly locates universals and mathematicals both in sensible instances and in abstracted concepts in the mind.

(14) Syrianus *in Metaph.* 95,13-17 Kroll

But one might wonder at Aristotle who even in these cases of succession puts the universals on the same level as the mathematicals; for as the

universals are, so the mathematicals are too. In reality both are in the substantial formal principles (*logoi* [concepts]) of the soul, but according to him they are in the sensibles and in the concepts (*epinoiai*) which abstract the common natures (*koinotêtes*) from the sensibles. RRKS

Reading

Ian Mueller, 'Aristotle's doctrine of abstraction in the commentators', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990.

(iv) Universals (7): Geometrical universals extended and pluralised in the imagination

When the Neoplatonists' recollected geometrical concepts (*logoi* here again refers to concepts) are projected (*proballein*) from the intellect into the imagination and spread out there as geometrical figures, they are still universals. So although the imagination normally entertains particulars, Proclus tells us in the following passages of *universals* in the imagination. Here and in Proclus *in Eucl. 1* 54,22-55,13, translated here (16) and in **12(b)**(8) below, we learn that universals can be 'distributed' (*katatetagmena*) not only in sensible instances, but also in the imagination, as they are here.

(15) Proclus *in Eucl. 1*, 51,13-20

Assuming that the participants themselves are of two kinds, perceptibles and things that exist in the imagination (for matter also is of two kinds, as Aristotle somewhere says: the matter of things tied to perception and the matter of things in the imagination (*phantasta*)), we shall admit that the distributed (*katatetagmena*) universals are of two kinds: one perceptible, being participated in by perceptible objects, and the other in the imagination (*phantaston*), existing in the plurality of things in the imagination. IM

(16) Proclus *in Eucl. 1*, 53,18-55,13

You should think that the universal which is present in many things is of two kinds: there is one in perceptible things and one in things in the imagination (*phantasta*). And the principle (*logos*) of circle or of triangle or that of figure itself is of two kinds, the one applying to (*epi*) intelligible matter, the other to perceptible matter. Prior to these are the principle (*logos* [a concept]) in the mind (*dianoia*), which gives existence to circles in the imagination (*phantastoi*) and the one form (*eidos*) in them, and the principle (*logos*) in nature, which gives existence to perceptible ones (since there are circles in the heavens and, in general, circles generated by nature). And just as the principle in the mind (*dianoia*) has no parts, so too the principle in nature has none; for extended things exist in an unextended way in incorporeal causes, things with parts exist partlessly, and magnitudes exist without magnitude, just as, conversely, things without parts exist with parts in corporeal causes, and things without magnitude

exist with magnitude. Consequently the circle in the mind is one, simple, and unextended, just as magnitude itself in the mind is without magnitude, and shape is without shape – for such things are immaterial principles – but the circle in imagination is divisible, it has shape, and it is extended; and there is not just one of them, but one and many; and it is not just a form, it is a form which is distributed (*katatetagmenon*). However, the circle among perceptibles is less precise, it is filled with straightness, and it lacks the purity of immaterial things.

[54,14] So when geometry says something about a circle and its diameter and its properties, for example, about tangencies and divisions of such things, let us say neither that its teaching is about perceptible circles – since it undertakes to make a separation from perceptible things – nor that it is about the form in the mind (*en dianoiai eidos*). For the circle is one, but geometry makes statements about many circles; it projects (*proballein*) each of these circles with respect to one circle and studies the same things in all of them. That one circle is indivisible, but the circle in geometry is divisible. We must grant the geometer that he is investigating the universal, but this is the universal which is distributed in circles in the imagination (*phantastoi*). He sees one circle, he theorises with respect to another, the circle in the mind, and he makes his proofs about a different one. For the mind has the principles (*logoi*), but, being too weak to see them in a folded way, it unfolds and develops them and leads them into the imagination, which lies in the entryway [of the mind], and it unrolls its knowledge of them in imagination or with imagination, enjoying its separation from perceptible things, and finding matter in imagination (*phantastê*) well prepared for receiving its own forms. So the insight of geometry involves imagination, the combining and dividing of figures occur in imagination (*phantastai*), and its knowledge (*gnôsis*) is a path to intelligible substance (*dianoêtikê ousia*), but it has not yet reached those heights, since the mind looks outside itself, and, although it studies these things with respect to what is inside itself and makes use of projections (*probolai*) of its principles (*logoi*), it moves from itself into what is outside it. IM

Reading

Ian Mueller, 'Syrianus and the concept of mathematical number', in Gerald Bechtle, Dominic O'Meara, eds, *La philosophie des mathématiques de l'antiquité tardive*, Fribourg 1998, 72-83.

(v) Universals (2): Forms as creative *logoi* in the mind of God

Although this idea arises already in Middle Platonism of the first century AD, as illustrated in the next four texts, it remained Platonist orthodoxy, and Asclepius in the sixth century even claims the agreement of Aristotle.

(17) Atticus fr. 9 [Baudry], from Eusebius *PE* Mras *GCS* 8, 15.13,4-5 (815C-D Viger)

It is just in this respect that [Plato] surpasses all others. Conceiving that God is father and creator and lord and guardian of all things with reference to the Ideas, and recognising, on the analogy of material creations, that the craftsman first forms a conception (*noêsai*) of that which he is proposing to create, and then, once he has formed his conception, applies this likeness to the material, he concludes by analogy that the thoughts (*noêmata*) of God are anterior to material objects, models of the things that came to be, immaterial and intelligible (*noêta*), always remaining identically the same. JD

(18) Philo *De Opificio mundi* 5

[20] Just as the prefigured town in the architect does not occupy an outside place but is impressed in the artisan's soul, in the same way the world (*kosmos*) that consists of Forms does not occupy a place different from the divine reason which has ordered everything. For what other place could there be for his powers which would be adequate to receive and make room for any one of his powers in purity – not to mention all of them?

[21] The art of creating the world is also [such] a power which has true goodness as its source. For if someone wished to search for the cause for the sake of which this universe (*to pan*) was created, he would not miss his goal, if you ask me, if he said what one of the ancients also said, that the father and maker is good [Plato *Tim.* 28C3-4]. Because of this he did not grudge something of his own supreme nature to a substance which has nothing beautiful of its own accord but is capable of becoming everything.

[22] For of its own accord it was unordered, lacking all qualities, soulless, <unlike>, full of diversity, ill-adjustment, disharmony. But it began to receive conversion and change towards the contraries of these conditions, indeed to what is best: order, possessing quality, possessing soul, likeness, sameness, perfect adjustment, harmony, all to the measure of the more excellent Form. FDH

(19) Alcinous *Didaskalikos* ch. 9, 163,11-38

1. Matter constitutes one principle, but Plato postulates others also, to wit, the paradigmatic, that is the forms, and that constituted by God the father and cause of all things. Form is considered in relation to God, his thinking; in relation to us, the primary object of thought; in relation to Matter, measure; in relation to the sensible world, its paradigm; and in relation to itself, essence. For in general everything that we can conceptualise must come to be in reference to something, of which the paradigm must pre-exist, just as if one thing were to be derived from another, in the way that my image derives from me; and even if the paradigm does not always subsist externally, in any event every artist, having the paradigm in himself, applies the structure of it to matter.

[163,23] 2. Form is defined as an eternal model of things that are in accordance with nature. For most Platonists do not accept that there are

Forms of artificial objects, such as a shield or a lyre, nor of things that are contrary to nature, like fever or cholera, nor of individuals, like Socrates and Plato, nor yet of any trivial thing, such as dirt or chaff, nor of relations, such as the greater or the superior. For the Forms are eternal and perfect thoughts of God.

[163,31] 3. They justify the existence of Forms in the following way also. Whether God is an intellect or is possessed of intellect, he has thoughts, and these are eternal and unchanging; and if this is the case, Forms exist. For if matter is unmeasured in its own right, it needs to receive measures from something else superior to it and immaterial. But the former is true; therefore so is the latter; and if this is the case, then Forms exist as a type of immaterial measure. JD

(20) Seneca *Letter* 65.7

To these Plato adds a fifth [cause], the pattern, which he himself calls the Idea; for this is that to which the craftsman looked in making what he intended. It makes no difference whether he has an external model to which he directs his gaze, or an internal one which he himself conceived and laid down there [within]. These patterns of all things God has within himself, and with his mind he has comprehended the measures and melodies of all things that are to be done; he is full of these shapes which Plato calls the Ideas, immortal, unchanging, untiring. And so human beings indeed perish, but humanity, after which a human being is fashioned, remains; and while men weary and die, it suffers nothing. So there are five 'causes', as Plato says; that from which [the matter], that by which [the agent], that in which [the form in the matter], that with reference to which [the pattern], and that on account of which [the purpose]. And last [of all] there is what is from [all] these [the end-product]. RWS

(21) Syrianus *in Metaph.* 106,26-107,1

This [Intellect], which is full in respect of its thoughts, determines by means of Forms (*eidê*) the uncaused and independent (*automaton*) operation of its production (*poiêsis*). [By doing so], it gives to its creatures (*dêmiourgêmata*) a share of all good and fine things, and turns (*epeistrephein*) the universe towards itself and makes it like itself and creates (*dêmiourgein*) things of such and such quality and quantity as it thinks. And, being complete, it thinks everything. So nothing that has real being is left out of the essence of the Intellect, but it always situates the Forms (*eidê*) in itself. They are not different in it and in its essence, but complete its being and bring to everything the productive (*poiêtikê*), paradigmatic and final cause. For it creates as Intellect, and the paradigms exist as Forms and are productive through themselves and their own goodness. RRKS

(22) Asclepius from the voice of Ammonius *in Metaph.* 69,17-21

From this Aristotle seems to be referring to Plato concerning the Ideas. We have stated Aristotle's objective on this. For it is he who says in the treatise *On the Soul*, 'and those who called the soul the place of ideas spoke well', and that the active intellect is the things [it thinks], and again that the potential intellect is active but the active intellect makes [it so]. So he too openly stores Ideas in intellect. RRKS

Reading
John Dillon, *The Middle Platonists*, London 1977.

5(d) Stoic universals

To return to the deflationary accounts of universals, the next after Aristotle's were those of the Stoics. I shall follow the interpretation of Victor Caston, who provides up to date references to earlier interpretations. Ancient reports of the early Stoics do not agree with each other, having been written by later authors who were often hostile or attempting a summary. So one has to seek the minimum adjustments to get a plausible and consistent account.

The evidence is that the Stoics rejected Platonic Forms as being 'nothings', even if the point is sometimes put by saying that they rejected common features as nothings, Simplicius *in Cat.* 105,11, or rejected Forms as insubstantial (*anuparktoi*), Stobaeus 1.137,4-6. Nothings are not a special kind of somethings, and so they do not fit under the Stoic supreme genus of 'somethings'. That genus includes bodies, which have being, and incorporeals, which lack being, but it does not allow for 'nothings'. In fact 'nothings' are said not even to subsist as objects of thought, Sextus *Math.* 1.17.

Syrianus reports, *in Metaph.* 104,20-1, that only particulars, for the Stoics, have being. We shall see that they allow certain things to play the role of universals, but, at least in the case of Chrysippus, the things have the status only of somethings, not of beings.

Caston suggests that the first two Stoic heads, Zeno and Cleanthes, had concepts (*ennoêmata*) play the role of universals. Things can be said to 'fall under' (*hupopiptein*) concepts, Stobaeus 1.137,1, and it is the role of universals to have things fall under them. Concepts, which are familiar entities, can play that role just as easily as Forms, which are the special postulates of the Platonist School. Of course, they cannot play the further role assigned to Forms of being causes as well as universals. As further evidence that these Stoics made concepts play the role of universals, the same Stobaeus passage tells us that the concepts he is talking about were once called (by the Platonists) 'Ideas', but that according to the Stoics, what we participate in, to use the Platonist term, are only concepts. Simplicius *in Cat.* 222,30-3 adds that the common (*to koinon*) feature of quality in bodies boils down for the Stoics to a concept (*ennoêma*), and to a distinctively individual quality (*idiotês*), rather than a common one. He emphasises that it does not have causal power, nor eternity, like the Forms. Syrianus *in Metaph.* 105,19-30, less accurately speaks as if it was Forms themselves that Cleanthes treated as concepts (*ennoêmata*), rather than replacing Forms with concepts.

Chrysippus, the third Stoic head, is treated differently from Cleanthes in the Syrianus passage. He is said to take it that the Forms were introduced for use in conventions about names. And Caston suggests that Chrysippus offered as substitutes to perform this role not concepts, but *lekta*, 'sayables', or predicates.

Chrysippus does discuss genera and species under the heading of sayables, to judge from Diogenes Laertius *Lives* 7,43 and 200. Moreover, in Sextus *Math.* 11.11, Chrysippus is credited with the analysis of general terms outlined in 11.8. On this analysis, 'Man is a mortal, rational animal' is analysed as 'If anything is a man, it is a mortal, rational animal'. This shifts the reference to man to the predicate position, so that the talk is only of individual men, and employs an 'if' to avoid commiting itself to the existence even of these. The name 'Man' illustrates what Syrianus was saying concerning conventions about names. The Platonist Forms were offered as providing a reference for the name 'Man', but Chrysippus has made that unnecessary, by analysing 'Man' away, so that it does not act as the name of anything. In **11(c)** Caston's further suggestion is explained, that Chrysippus applied his analysis of 'Man' to the puzzle about Man being in both Athens and Megara, which would not be possible for an individual man.

Whether the Stoics offered both views of universals, as Caston suggests, or only one, in either case the account is deflationary. See (**11(c)**) for their deflationary treatment of Man in 'Man is rational'.

(1) Stobaeus vol. 1, 136,20-137,6 Wachsmuth (= Arius Didymus *Physics* fr. 40, *Dox. Gr.* Diels p. 472)

Zeno and his followers: they say that concepts (*ennoêmata*) are neither somethings, nor qualified things, but phantasms (*phantasmata*) of the soul that are as-if somethings and as-if qualified things, and that these [concepts] were called 'Ideas' by the ancient [Platonists]. For Ideas are Ideas of what falls under (*hupopiptein*) concepts, e.g. of men, horses and, to speak more generally, of all animals and the other things of which [the ancient Platonists] say there are Ideas. But the Stoic philosophers say that these ideas are without reality (*anuparktoi*), and that we participate in concepts (*ennoêmata*) and acquire cases (*ptôseis*), which they [the Stoics] call appellations (*prosêgoriai*). RRKS

(2) Syrianus *in Metaph.* 104,20-1

... or whether one said that only particulars (*ta kath' hekasta*) have being (*einai*), as the Stoics say. RRKS

(3) Simplicius *in Cat.* 222,30-3

The Stoics say of quality that its common feature (*to koinon*) in bodies is a differentiating feature of substance, a feature that cannot be grasped separately by itself, but terminates in a concept (*ennoêma*) and in a distinctively individual quality (*idiotês*). The feature is not informed by [endurance in] time, or by [causal] power, but by the suchness which comes from itself, and corresponding to this there subsists a coming into being of something qualified. RRKS

(4) Syrianus *in Metaph.* 105,19-30

But, so as not now to expatiate on a history that is plain to see, let us say

one word against [Aristotle] about Socrates, Plato, the Parmenideans and Pythagoreans. The Forms were not introduced by these divine men for use in conventions (*sunêtheia*) about names, as Chrysippus and Archedemus and most of the Stoics later thought, for the Forms in themselves have many differences distinguishing them from what is said in conventions. Nor are the Forms parasitic (*paruphistasthai*) on thought like the notorious 'sayables' ([Stoic] *lekta*), the view Longinus chose to champion, for nothing at all is parasitic on thought, if the parasitic is without substance (*anousion*); and how could the same thing be thinkable and parasitic? Nor yet are the Forms concepts (*ennoêmata*) for them, as Cleanthes later said, nor are they parasitic on thought in the manner of conceptual (*ennoêtikai*) ideas, as Antoninus said, combining the opinions of Longinus and Cleanthes. RRKS

(5) Sextus Empiricus *Math.* 11.8

The handbook writers (*tekhnographoi* [but Chrysippus is credited at 11,11]) say that the definition (*horos*) differs from the universal generalisation (*katholikon*) only in mere syntax and is the same in force. And that is plausible, for one who says, 'Man is a mortal, rational animal' says something the same in force, though different in vocal expression, as one who says, 'if anything is a man, it is a mortal, rational animal'. RRKS

Reading

D.N. Sedley, 'The Stoic theory of universals', *Southern Journal of Philosophy* 23, 1985 suppl., 87-92.

Victor Caston, 'Something and nothing: the Stoics on concepts and universals', *Oxford Studies in Ancient Philosophy* 17, 1999, 145-213, includes an up-to-date bibliography of previous interpretations.

Jacques Brunschwig, 'La théorie stoïcienne du genre suprême et l'ontologie platonicienne', in J. Barnes, M. Mignucci, eds, *Matter and Metaphysics*, Naples 1988, 21-127, translated in his *Papers in Hellenistic Philosophy*, Cambridge 1994, 92-157.

5(e) Alexander's universals

I have commented under **5(a)** that it is disputed how far Alexander intended to deflate universals, although later commentators took him as deflationary, and this may well have influenced the Islamic and Latin-speaking Middle Ages.

Alexander makes some statements which, at least at first sight, appear to turn universals into something mind-dependent. That would correspond to one of the ways in which Aristotle uses the term 'universal' (*katholou*), to refer to concepts, e.g. *An. Post.* 2.19, 100a6-b5, and perhaps to the conception of the early Stoics. Thus, at *DA* 90,2-11 (text (1)), cf. *Quaest.* 1.3, 8,3-4, Alexander says that enmattered forms *become* (*ginesthai*) common and universal by being thought, but do not, when not thought, exist any more, presumably do not exist as universals. At *Quaest.*1.3, 8,17-22, he says definitions are said to be of *thoughts* and of things that are common, like human being, which do not really exist in isolation [from particulars and their particular features], but are merely thought that way. At *Quaest.* 2.28,

79,16-18, he says that universals are constructed (*suntithenai*) by a conceptual separation (*têi epinoiâi khôrismos*). At *Quaest.* 2.28, 78,18-20, he says the genus taken as a genus is a mere name, not a thing that underlies (*pragma ti hupokeimenon*), and it has the property of being common (*koinon*) only in thought (*noeisthai*), not in reality (*hupostasis*). (Cf. Philoponus *in DA* 307,35.) Marwan Rashed has identified some Arabic paraphrases of lost Alexander, which he numbers T1, T2 and T5, which corroborate the idea that the genus and the universal exist only in the mind.

By contrast, Alexander does not make *forms* or *natures* mind-dependent in texts (5), (6), (7), and (8) from *Quaest.* 1.3, 1.11, and *in Top.* 355,18-24. Examples are mortal rational animal and animate being with sensation. These forms can *become* universal, we have seen, according to text (1), and *as such* are thought-dependent, but are not *intrinsically* universal.

Although it might seem so far that the universal is a mere mental construct, it turns out that it is also treated as depending for its existence on the existence of particulars, indeed, of more than one particular. For Alexander(?) thinks that for animal, or any other form or nature to be universal (*katholou*, *Quaest.* 1.11, 23,25-31), or a genus (*in Top.* 355,18-24), is for there to be more than one specimen similar in form, and it is merely accidental to the form whether there is more than one specimen. The universal only exists if there is more than one. This point, dependence on the existence of more than one particular, goes beyond Aristotle, for Aristotle's definition of universals at *Int.* 17a39-40 requires only that a universal is *shareable*, whereas Alexander's is actually *shared*. Moreover, the requirement of at least two specimens has nothing to do with the mind, since the accidental occurrence of more than one specimen does not depend on our recognition, although at *DA* 85,20; *Quaest.* 1.3, 8,3-5, there is an emphasis on someone's *taking* (*lambanein*) the form in separation from the matter, as if our *thought* were at least in some way relevant.

Alexander downgrades universals in other statements too. When in *Quaest.* 1.11, 23,25-31; 21,24, Alexander(?) says that the universal is not a thing in itself (*pragma ti kath' hauto*), or not a thing in the proper sense, but an accident (*ou pragma ti kuriôs alla sumbebêkos ti allôi*), his point is that the form or nature which 'animal' signifies (viz. animate being with sensation) is not universal in the sense that there has to be more than one instance of it. The same point is made at *Quaest.* 1.11, 24,11-16; *in Top.* 355,18-24, that the form or nature of animal could still exist, even if there were no animal as genus, in the sense that there was not more than one instance of it. Alexander(?) drew the conclusion that the definition of human being would be the same, even if there were only one human being, so that definitions are not of things that are common *as common*, but of things whose form or nature may *happen* to be shared, *Quaest.* 1.3, 8,12-17. Simplicius *in Cat.* 85,13-17, text (9), ascribes to Alexander the view that the sun exists independently of any common feature, and David's report of Alexander on the sun is similar, *Scholia in Aristotelem*, ed. Brandis, 1836, 29b.

If Alexander's two criteria of thought-dependence and existence in at least two specimens do not represent two different ways of being universal, how can they be combined into one? Perhaps we might compare how the equator or the boundary of a country depend on the mind and are in the mind, but are also applied to the surface of the earth. This interpretation may be supported by his giving a parallel treatment to objects of mathematics at *in Metaph.* 52,15-21, translated and discussed in **12(a)** below. Objects of mathematics are said to exist *by* thought (*epinoiai*), but *in* sensibles. See there for Alexander's view on their location. There is further support in Boethius, *in Isag.*, translated below by Spade, under **5(g)**. Boethius claims in 164,4, to be giving Alexander's view, and it is the combined view

that he presents in 166,14-23 = §§30-1. There he says that a species is a thought (*cogitatio*) gathered from the individuals. But nonetheless he says in the very same breath that the species is a likeness that cannot exist except in the individuals. If the likeness is meant to be between individuals, rather than (Tweedale) to a Platonic Form, Boethius will think that at least two individuals must be involved.

What, then, is mind-dependent and why? On one interpretation, my form or nature, which is mortal rational animal, is particular, *as it resides in me*, and is distinct, though only numerically, from yours. Indeed, the forms or natures of particular humans are spoken of in the plural at *DA* 85,17 in text (4). Such a particular form could be an instance of, or in Aristotle's terms have said of it, a mortal rational animality that was shared or shareable and so universal. Might it, then, be this universal mortal rational animality that is made to depend for its existence on being separated in thought from this matter and its peculiarities, at *in DA* 90,2-11 and *Quaest.* 2.28, while the *particular* form or nature remains independent of the mind, and the form or nature *itself* is neither intrinsically universal nor intrinsically particular? This interpretation has the advantage of showing how Alexander could have thought of universals as dependent on the mind.

But Tweedale objects that that does not seem to be what Alexander thought in *Quaest.* 1,11, which discusses Aristotle's remark, 'For the universal animal is either nothing or posterior', *On the Soul* 1.1, 402b7. The universal is here downgraded by Alexander, not admittedly as mind-dependent, but as the mere accident of existing in many things differing in species. When this accident is said to attach to the real thing (*pragma*), 21,22-31, the real thing can hardly be a particular form or nature, because that does not possess, even as an accident, the characteristic of existing in many things. The real thing seems therefore to be the generic form or nature, animal, viewed neither as particular nor as universal, because it remains the same regardless of the accident of being or not being shared by things in more than one species. And that fits with text (13) from the same *Quaestio*, which goes even further and makes the existence of species and particulars depend on the existence of the common genus under which they fall.

The same question of dependency is raised at *in Top.* 4.5, 355b18ff.; D4 Dietrich *Refutation of Xenocrates*, translated S. Pines, *Transactions of the American Philosophical Society* 51, 1961, repr. in his *Collected Works*, vol. 2, Jerusalem and Leiden 1986, 9-10; and Rashed T1. So far, however, the point about dependence need not give more reality to the genus, because the point may be one about the particular *members* of the genus, that if all are destroyed, so will be any one member. What gives more reality to the genus in text (13) is only the final remark, 24,22, which A.C. Lloyd, p. 51, plausibly regarded as inauthentic, that the individual members would be destroyed because *their being consists in* possessing the common genus. I think it unlikely that Alexander himself said this. It is close to what Simplicius accuses him of ignoring, *in Cat.* 82,30-5, text (11), that an individual cannot exist independently of what is common, because the latter *completes* it (*sumplêroun*). And in general, later authors understood Alexander to be deflating universals.

Alexander is again according reality to the *members* of species more than to the species themselves, when he talks, as in text (12), of Providence being concerned to preserve universal species, not individuals. For text (12), for example, of which there is a fuller extract in **Physics 4(a)**(4), suggests that Providence does so by preserving, enough individuals for the species to exist. The order of priority seems to be reversed here, with the species depending on there being individuals. A similar view is found in *Quaest.* 1.3, 8,22-8 at the end of text (5), and in *in Metaph.* 215,15-18, text (14), where as Sharples points out, the form is eternal in virtue of the succession of particular parental forms. Eternity is similarly made to depend

on an eternal succession of individuals, in the case of species ((5), (12) and (14)), universals (Alexander(?) *Quaest.* 1.3, 8,22-4) and later the active intellect ('Philoponus', translated in **17(e)**(6) below; Philoponus *in de Intellectu* 49,48-54, 91,40-9).

No realism about genus and species need be implied by other questions that Alexander raises, e.g. whether genus is matter to species (*Quaest.* 2.28; Rashed T1), and whether genus is composed of species (Rashed T2).

(1) Alexander *DA* 90,2-11

Therefore, in the case of forms that are in matter, as I said, whenever such forms are not being thought, none of them is intellect, if it is in their being thought that their being intelligibles has its existence (*hupostasis*). For the universal (*katholou*) and common (*koinon*) things have their being (*huparxis*) in the individuals that are in matter; but when they are thought apart from matter they come to be common and universal, and they are intellect at the time when they are thought. But if they are not thought, they are not any more [i.e. do not exist any more at all, though the Greek itself does not have to mean more than 'are not intellect any more']. So, when they are separated from the intellect that thinks them, they perish, if their being (*einai*) consists in being thought. And similar to these are the products of abstraction, such as mathematical [entities]. So this sort of intellect – that is, thoughts (*noêmata*) of this sort – is perishable. RWS

(2) Alexander(?) *Quaest.* 2.28, 79,16-18

Genera supervene (*epiginesthai*), in the things which have their being (*einai*) and existence (*hupostasis*) on account of matter, as the product of that which constructs (*suntithenai*) them through separation in thought from the other things which exist along with them. RWS

(3) Alexander(?) *Quaest.* 2.28, 78,18-20

But genus taken as genus is not a thing that underlies (*pragma ti hupokeimenon*), but a mere name, and it possesses the [property of] being common in its being thought of, not in some reality (*hupostasis*). RWS

(4) Alexander *DA* 85,15-20

For the person who takes (*lambanein*) the form of human being apart from the material accompaniments has the common human being; for the difference between particular (*kath' hekasta*) human beings derives from their matter, since their forms, in virtue of which they are human beings, have no difference. The person who observes (*sunidein*) what is common to particulars, in turn, takes (*lambanein*) the form apart from the matter. For this [the form] is what is common and the same in them. RWS

(5) Alexander(?) *Quaest.* 1.3, 7,27-8,28

Rather, definitions are of the [things] that are common in the particulars (*kath' hekasta*), or of the particulars according to the [things] that are common in them. For in particulars (*kath' hekasta*) some [features] are distinctive (*idia*) and particular, but those that are common and correspond [in the different particulars], [as] being common and not differing in their own nature, are, in all the things in which they are, the causes (*aitia*) of all the things that possess them being of a similar and identical nature. For mortal rational animal, if it is taken along with (*lambanein meta*) the material circumstances and differences that the existence (*hupostasis*) of [particulars] goes with (*meta*) and that are different in different cases, produces (*poiein*) Socrates and Callias and particular human beings; but if it is taken apart from (*lambanein khôris*) these, it comes to be common, [and common] *not* because it is not in each of the particular human beings (for the distinctive features of particulars go with these [particulars]), but because it is the same in all.

[8,6] Well, definitions are of what is common like this and in this way; and for this reason it is the same for many of the particulars. And for this reason definitions of such things are not of some incorporeal nature which is separate from the particulars. For the definition of human being, two-footed land animal, is common, being in all particular human beings and in each in its entirety; [it is] common because it is the same in several things, not because each possesses a part of it. [For] *each* human being is a two-footed land animal.

[8,12] And for this reason definitions are not of [things] that are common *as common*, but of those to which it attaches as an accident (*sumbainein*) that they are common in the case of each nature. For even if there were only one human being in existence the account of 'human being' would be the same. For this is not the account of it because it is present in many [particulars], but because it is in accordance with a nature of this sort that a human being is a human being, whether there are several sharing in this nature or not.

[8,17] Definitions are said to be of thoughts (*noêmatôn*) and of [things] that are common because it is [the function] of intellect to separate 'human being' from the other things with which it exists and to grasp it on its own; and the definition of that whose existence is accompanied by other things, when it is thought (*noeisthai*) apart from those and other things and not in the way in which it [actually] exists, seems to be of a thought (*noêma*) For such a [thing], being thought in each [particular] apart from its accidents, is something common and the same in several [things].

[8,22] But the [things] that are common are imperishable through the eternity by succession of the particulars in which they are; for [this] is [the eternity] of what remains similar and the same in the coming-to-be of all the particulars.

[8,24] This is what the [things] that are common are like, not being

[present] only in those of particulars that exist along with one another and being common for *this* reason, but [being present] in all things of the same form. And for this reason, nothing prevents something that is mortal from being eternal; for it is eternal while being mortal *as the particulars*. RWS

(6) Alexander(?) *Quaest.* 1.11, 23,25-31

The subject to which 'universal' (*katholou*) attaches is a thing; the universal is not a thing in itself, but something that attaches by accident to that [thing]. For example, animal is a thing and indicates a certain nature; for it signifies an animate being with sensation – and this in its own nature is not universal. For it will exist no less even if it were supposed that only one animal in number were to exist. But (the feature) applies to it that, being like this, it is in several [individuals], and in ones that differ from one another in species. RWS

(7) Alexander(?) *Quaest.* 1.11, 24,11-16

And if animate being with sensation [the form of animal] were done away with, animal as genus would not exist (for it is not possible for what *is not* [sc. the form] to *be* in several individuals [sc. as is needed if the genus animal is to exist]); but if animal as genus were done away with, it is not necessary for animate being with sensation to be done away with. For it could exist, as I said, even in a single [individual], and it is on account of this that it was said 'it [universal animal] is either nothing or posterior' (Aristotle *DA* 1.1, 402b7). RWS

(8) Alexander *in Top.* 355,18-24

So the subject to which it attaches by accident that it is a genus perishes without qualification, if all the things that fall under it perish; it perishes *as a genus* if only one of the things that fall under it, [one] in number or in species, is preserved. For animal is a genus not because it is animate being with sensation, but because such a nature exists in several things that differ from each other in species; if these were done away with and only one were preserved, animate being with sensation, that is animal, would no longer be a genus. RWS

(9) Simplicius *in Cat.* 85,13-17, reporting Alexander

However, [Alexander] claims, no common feature (*koinon*) can exist without the individual, but the individual exists without the common feature, e.g. the sun, the moon, and the universe.

Against this it must be said that it was for a different chance reason that the matter of each of these received the form only once. However, the principle (*logos*) is constituted in such a way that if there were indeed many

[things] naturally disposed to receive it, it can give itself to the multitude. FDH

(10) Simplicius *in Cael.* 275,5-8

In cases where a shape and form can be separated from the matter in thought, the form is by nature common (*koinophues*), and the number of its enmattered perceptible participants either is or can be more than one. FDH

(11) Simplicius *in Cat.* 82,30-5

So [Alexander] wrongly took this too as a sign that individuals are first according to nature, that when what is common is eliminated the individual is by no means eliminated. [He is wrong] because, if what is common has its being in relating to the individuals as a whole and in completing (*sumplêroun*) them, and if the individual [has its being] in being completed by what is common, how will the individual not be eliminated as soon as what is common is eliminated? FDH

(12) Alexander *On Providence*, trans. Abû Bishr Mattâ, 89,1-7

The successive generation of single particulars of the same form affords things down here a way to last forever. The effect of that [successivity] is to bring out what is universal. For the generation of particulars serves to maintain the universal species they have in common. Socrates comes into being so that there be man[kind]; Achilles' horse Xanthus comes into being so that there be horse[kind]. Universals have their subsistence in singularities. FWZ

(13) Alexander(?) *Quaest.* 1.11, 23,11-13; 24,16-22

For that which is predicated of certain things as their genus, when it is done away with, does away with, along with itself, all the things under itself. ...

But, being posterior to the thing to which it attaches by accident, conversely it itself comes to be primary in relation to each of the things that are particular (*en merei*) and [fall] under it; for being a genus consists in being predicated of many differing things, while being a particular is being, along with many [other] things, under some one thing, either genus or species. And for this reason, when one of the things that fall under what is common is done away with, what is common is not done away with along with it, since it is in several [individuals]; but if what is common were done away with, none of the things that fall under what is common would exist, since their being consists in possessing it in themselves. RWS

(14) Alexander *in Metaph.* 215,15-18

He [Aristotle] rightly assumes that, as matter [exists as eternal], there must also exist some eternal form – not that the form which comes to be in the matter must be this; rather it is the productive form which, if it is like the form that is produced, would be in some manner pre-existent. AM

Reading

A.C. Lloyd, *Form and Universal in Aristotle*, Liverpool 1981, esp. 49-65.
Paul Moraux, *Alexandre d'Aphrodise, exégète de la noétique d'Aristote*, Liège & Paris 1942.
S. Pines, 'A new fragment of Xenocrates and its implications', *Transactions of the American Philosophical Society*, n.s. vol. 51, 1961, repr. in his *Collected Works*, vol. 2, Jerusalem & Leiden 1986, 3-95.
Marwan Rashed, 'Priorité de l'eidos ou du genos entre Andronicus et Alexandre: vestiges arabes et grecs inédits d'Alexandre d'Aphrodise', *Arabic Sciences and Philosophy*, 14, 2004, 9-63.
R.W. Sharples, review of Lloyd (above), *Liverpool Classical Monthly* 7, 1982, 15-17.
R.W. Sharples, 'Alexander of Aphrodisias', *Aufstieg und Niedergang der römischen Welt* 2.36.2, 1987, sec. 8.
M.M. Tweedale, 'Alexander of Aphrodisias' views on universals', *Phronesis* 29, 1984, 279-303.

5(f) Porphyry's universals

Porphyry leaves open at *Isag.* 1,9-16 as too profound for beginners the question whether genera and species exist in reality or in thought, whether they are corporeal or not, and whether they exist separately from sensibles or not.

He sometimes seems, like Alexander, to attach a certain priority to genera (*genê*), since at *Isag.* 14,10-12; 15,12-13; 15,16-20; 17,3-4, he makes species depend for their existence on genera. But this proves little. For one thing, we say that Alexander may have meant no more than that no species in the genus will survive, if all the species perish. For another thing, at *in Cat.* 90,14-26 Porphyry introduces a puzzle which similarly makes Socrates depend for his existence on genera, but nonetheless identifies genera with what is predicated in common (*to koinêi katêgoroumenon*), which he treats as if it were merely something thought-dependent. He sometimes uses certain other terms also, such as 'universal' (*katholou*), or 'common feature' (*koinon*), as if they referred to thought-dependent things. His puzzle is that what Aristotle calls '*primary* substance', e.g. Socrates, depends for his existence on the human and animal that are predicated in common, i.e., so the puzzle says, on species and genus. So why is Socrates primary? In reply Porphyry says at 90,32-91,5 (cf. Simplicius *in Cat.* 84,20-3 and 24-8) that, if we take not just Socrates but all the members of the species or genus, and consider those common features (*koina*) which are predicated in common (*to koinêi katêgoroumenon*), ontological dependence is reversed, because we *conceive* (*noein, epinoein*) animal or horse only through particulars. The genus is here again closely connected with our thoughts. Similarly, at *in Cat.* 75,24-9, Porphyry mentions that to call something a universal (*katholou*) is to refer to how it is conceived (*epinoia*). But even this hint that universals may be thought-dependent he characterises as too profound for beginners. Notable for its absence from the profundities set aside is any reference to Platonic Forms as universals. But it was seen in **5(a)** above that Forms were, by

Proclus and Simplicius, seen as less clear cases of *common* features than were concepts.

Sten Ebbesen has conjectured that Porphyry may have thought of universals as concepts; and Ammonius *in Isag.* 62,2-11 describes him as discussing only mentalistic universals. But he may rather have taken Alexander's view of universals as thought-dependent, but located outside the mind in a plurality of particulars. We have seen that Alexander thinks of a universal as something the mind constructs, and that he also requires the accidental feature that two or more suitable particulars should share the form. Porphyry seems to echo this reference to universality as an accidental feature at *in Cat.* 81,16-20. Perhaps Porphyry is, for the purposes of beginners, merely following Alexander's treatment of universals. If so, he gave Alexander more influence on posterity than perhaps he would have intended. But perhaps Porphyry gives a view related to Alexander's because he already doubts the strict universality of Platonic Forms.

(1) Porphyry *Isag.* 1,9-16

For example, I shall beg off saying anything about (a) whether genera and species are real or are situated in bare thoughts alone, (b) whether as real they are bodies or incorporeals, and (c) whether they are separated or in sensibles and have their reality in connection with them. Such business is profound (*bathus*), and requires another, greater investigation. Instead I shall now try to show you how the ancients, especially the Peripatetics, interpreted genus and species and the other matters before us in a more logical fashion. PVS

(2) Porphyry *in Cat.* 75,24-9

Why did you say that universals (*ta katholou*) are *said of* a subject, but that accidents are in a subject? What do you mean by speaking of the former as 'said of', but of accidents as 'being'? The reason for this is profound (*bathus*) and beyond your level of comprehension. It is beyond the level of comprehension of a beginning student to know that while accidents exist just as substances do, to call something a universal is not to ascribe any real property to it (*en huparxei*), but refers to how it is conceived (*mekhri epinoias*). So let us leave these issues to one side. SS

(3) Porphyry *Isag.* 14,10-12

It is a common feature [of genus and differentia] that if either genus or differentia is taken out of existence, what falls under them is taken out of existence. For as neither horse nor man exists, if animal does not exist, so animal using reason will not exist, if rational does not exist. RRKS

(4) Porphyry *in Cat.* 90,14-26; 90,30-91,5

[Puzzle] [If], when we eliminate in thought (*epinoia*) the human that is predicated in common (*koinêi* [Busse's proposed reading] *katêgoroumenos*),

Socrates, who is an individual and a primary substance, is also eliminated, how can it be that the species is not more a substance <[Busse's supplement] than the individual (*atomos*), and the genus more a substance than either the species or the individual substance>, since when animal is similarly eliminated in account (*tôi logôi*), both human and Socrates no longer exist? ...

Similarly in the case of animal. ...

If those things are primary which eliminate other things along with themselves, but are not themselves eliminated when the others are, and animal and human eliminate Socrates along with themselves, but are not themselves eliminated along with Socrates, then Socrates would not be primary substance, but rather the genera and species would be. How would you respond to this difficulty (*aporia*)?

[90,30] [First reply] You ought not to speak merely about a single human: you must recognise that individual substance does not mean just one of the particulars (*kath' hekaston*), but rather all of the particular humans from whom we conceive (*epinoeisthai*) the human that is predicated in common (*koinêi katêgoroumenos*) and all the particular animals, through which we think (*noein*) the animal that is predicated in common. These are the cause of the being of the common predicates. For it is not possible to think (*noein*) of ox or horse or man in general apart from (*para*) the particulars. But if it is from the perception of particulars that we come to conceive of the common predicate (*to koinêi têi dianoiai aphikneisthai*), which we no longer think of as a 'this', but as a 'such', then if the particular animals are eliminated, what is predicated in common of them will no longer exist either. SS

(5) Porphyry *in Cat.* 81,16-20

To say that 'man' is something predicated in common (*kata koinotêta*) indicates an accident (*sumbebêkos*) of it, rather than its essence – not an accident in the strict sense, but something like a differentia (*diaphora*) of it. Man differs from Socrates in that the former is predicated in common, while Socrates is not predicated in common, but individually. SS

Reading

For different reconstructions, see:

Riccardo Chiaradonna, 'L'interpretazione della sostanza Aristotelica in Porfirio', *Elenchos* 1996, 55-94.

Sten Ebbesen, 'Porphyry's legacy to logic', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, taken from Ebbesen's *Commentators and Commentaries on Aristotle's Sophistici Elenchi*, vol. 1, 138-58.

Frans de Haas, 'Did Plotinus and Porphyry disagree on Aristotle's *Categories*?', *Phronesis* 46, 2001, 492-526.

A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, 40-1; 68-9.

See also:

A. De Libera, Introduction to *Porphyre, Isagoge*, text and translation with A.-Ph. Segonds, Paris 1998.
A. De Libera, *L'art des généralités, théories de l'abstraction*, Paris 1999.

5(g) Boethius' interpretation of Alexander's universals

Boethius comments on Porphyry's questions and expounds the case against the reality of universals. Species exist in particulars, it is only as thought that they are universal or common. Boethius says he is following Alexander (164,4 Brandt = §23 Spade, not translated), not giving his own view, §37(167,15-20). Thus, it was the views of Alexander, transmitted through Porphyry and Boethius, not the belief in Platonic Forms, that had the greater influence on the Latin-speaking medieval debate.

It was argued in the discussion of Alexander's universals how close Boethius is to him in §§ 30-2(166,14-167,7). There Boethius says that a species is a thought (*cogitatio*) gathered from the individuals. But nonetheless he says in the very same breath that the species is a likeness that cannot exist except in the individuals. If the likeness is between individuals, rather than (Tweedale in **5(e)** above) to a Platonic Form, Boethius will think that at least two individuals must be involved. Boethius states a similar sounding view in *Against Eutyches*.

In *On the Trinity* (sec. 2, line 51 in the revised Loeb edition), Boethius may express a belief in Platonic Forms. But this will not represent a different view, if, like Proclus and Simplicius, he did not see Forms as strictly universal.

In *de Divisione* 8,9-16; 38,22-5, Boethius treats universal man differently as composed of individual men as its parts (Richard Cross, 'Gregory of Nyssa on universals', *Vigiliae Christianae* 56, 2002).

(1) Boethius *in Isag.*[2] book 1, chs 10-11, 161,8-11; 166,14-167,20, *CSEL* 48, ed. Brandt, in Spade §8; §30-7

§8 [161,8] It is hard for Porphyry himself to resolve these questions. For the time being, he declines the task. Nevertheless I shall undertake it in such a way that I do not leave the reader's mind troubled about them, and so that I myself do not devote time and labour to matters outside the order of the job I have taken on. ...

§30 [166,14] This likeness [of humanity] thought by the mind and gazed at truly, is the species. Again, the likeness of these diverse species, which [likeness] cannot exist except in these species or in their individuals, makes a genus when it is considered.

§31 [166,16] And so these things exist in singulars, but are thought of as universals. Species is to be regarded as nothing else than the thought (*cogitatio*) gathered from the substantial likeness of individuals that are unlike in number. Genus, on the other hand, is the thought gathered from the likeness of species. This likeness becomes sensible when it exists in singulars, and becomes intelligible when it is in universals. In the same way, when it is sensible it stays in singulars, but when it is understood it becomes universal. They subsist therefore in the realm of sensibles, but are understood apart from bodies.

§32 [166,23] For it is not ruled out that two things that are conceptually

diverse should be in the same subject, like a convex line and a concave one. Since these things are bounded by diverse definitions, the understanding of them is diverse. Yet they are always found in the same subject. For the same line is concave as is convex. So too, for genera and species – that is, for singularity and universality – there is one subject. But it is universal in one way, when it is thought, and singular in another, when it is sensed in the things in which it has its being.

§33 [167,7] Now that these matters are finished, every question is answered, I think.

§34 [167,8] [Reply to (a):] For genera and species subsist in one way, but are understood in another.

§35 [167,9] [Reply to (b):] They are incorporeal, but subsist in sensibles, joined to sensibles. They are understood, however, as subsisting by themselves, and as not having their being in others.

§36 [167,12] [Reply to (c):] But Plato thinks genera and species and the rest are not only understood as universals, but also exist and subsist apart from bodies. Aristotle, however, thinks they are understood as incorporeal and universal, but subsist in sensibles.

§37 [167,15] I did not regard it as appropriate to decide between their views. For that belongs to a higher philosophy. But we have carefully followed out Aristotle's view here, not because we would recommend it the most, but because this book [the *Isagoge*] is written about the *Categories*, of which Aristotle is the author. PVS

(2) Boethius *Against Eutyches* 3, revised Loeb edition lines 29-33

And, to use Greek in matters which were raised by the Greeks, before being interpreted in Latin, 'essences (*ousiai*, Latin *essentiae*) can be in universals, but they have reality (*huphistasthai*, Latin *substare*) only within individuals and in a particular way'. RRKS

Reading

Paul Vincent Spade, *Five Texts on the Mediaeval Problem of Universals*, Indianapolis 1994, Introduction.

5(h) Forms as causes: *genus* as causative in Neoplatonism

Platonic Forms have causal and creative power (see e.g. **3(m)** above). Genus, we saw in **5(a)** above, is treated by Iamblichus and Simplicius as a transcendent cause or principle, e.g. Simplicius *in Cat.* 53,9-12; 77,1-4; 80,2-7, even though there is also the non-transcendent genus, 77,3-4; 80,5-7. Porphyry below seems to be talking of the non-transcendent genus, but still gives it some causal power. Proclus *in Parm.* 650,19-34 distinguishes the real transcendent genus from the lower genus that participates in it. The transcendent genus contains the causes of the species, and this point about genera creating species is also made by Plotinus 6.2 [43] 9 (1-11), quoted above under **3(r)**. The transcendence of the genus gives Proclus a quite different reason from Alexander's (see **5(e)** above) for denying that genus is a whole composed of species as parts.

5(h) Forms as causes: genus as causative in Neoplatonism

Three things may make the causal power of transcendent genus easier to understand. First is the point made under **5(a)** that Forms were no longer seen to be particularly clear examples of universals, something that we regard as inert. Simplicius *in Cat.* 83,10-12, translated there, treats them as common causes, not common natures. Secondly, we should bear in mind that for Plotinus intelligible entities are not only objects of thought, but also as explained below, **16**, are themselves thinkers. This idea is based above all on Plato *Sophist* 248E-249A, which says that what has complete being must have soul, life, thought (*phronein*) and intellect (*nous*). Thirdly, Porphyry explains that the term 'genus' was used in ordinary Greek, both of someone's birth and of the entire clan of someone's descendents. The philosophical use, he suggests, involves not only the idea of including all the members, as with a clan, but also the idea of origin (*arkhê*), as with descendents and birth.

(1) Proclus *in Parm.* col. 650,19-34

The genus is the 'single idea' spread through many separate things and existing in each of them; for the genus is not a bundle (*athroisma*) of species, like a whole of parts, but is present in each of the species as existing before them and participated in both by each of the separate species and by the genus itself. The species are the many ideas different from one another but comprehended by one single embracing idea, which is the genus; though it is outside them, as transcending the species, yet it contains the causes of the species; for to all those who posit Ideas, real genera are thought to be both older and more essential than the species ranged under them; the realities existing prior to species are not identical with the characters that exist in the species by participation. GM, JD

(2) Porphyry *Isag.* 1,18-2,4; 2,10-17, *CAG* 4.1

Neither 'genus' nor 'species' looks like being said in a single sense. For 'genus' is said (1) of the bundle (*athroisis*) of things that are disposed in a way relative (*ekhein pôs pros*) towards some one thing and towards each other. The genus of Heracleidai is called a genus in this sense from its relation of dependence on one person, I mean Heracles, and on the multitude (*plêthos*) of those who are disposed in a way relative towards each other in respect of their kinship with him. This multitude is named in distinction from other genera.

In a different way again, (2) 'genus' is said of the origin (*arkhê*) of each persons' birth, whether from the begetter, or from the place in which he was born. It is in this way that we say Orestes has his genus from Tantalus, Hyllus from Heracles, and again that Pindar is Theban by genus, and Plato Athenian. ...

In a different way again, (3) 'genus' is said of that under which the species is arranged (*hupotassesthai*). This is perhaps called a genus by way of similarity to the other cases, for a genus of this sort is a kind of origin

(*arkhê*) of what comes under it, and is also thought to include (*periekhein*) the whole multitude that comes under.

'Genus', then, is said in three ways, but among philosophers discussion concerns the third. By way of a sketch, they present it by saying that a genus is what is predicated of several things different in species in telling what they are (*en tôi ti esti*), e.g. animal. RRKS

Reading

Frans de Haas, 'Did Plotinus and Porphyry disagree on Aristotle's *Categories*?', *Phronesis* 46, 2001, 492-526.
A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, 17.
Lucas Siorvanes, *Proclus*, Edinburgh 1996, 68.

5(i) Forms as causes: *dunamis* in Neoplatonism

Not only do Platonic Forms have causal power, but for the Neoplatonists the One and all intelligibles have power (*dunamis*) in a sense which needs to be distinguished from Aristotle's mere potentiality. Aristotle implies that his divine unmoved mover has infinite power (*dunamis*) to cause motion. And he distinguishes the potentiality to act from the potentiality to be acted upon. But he is willing to treat these last two as *dunameis* in the same sense, *Metaph.* 5.12; 9.1-5, and, on the whole, his concept of positive power is not so active as the perfect *dunamis* of being postulated by the Neoplatonists.

Power distinguished from potentiality and imperfect fitness:

(1) Simplicius *in Phys.* 400,26-401,1

Being potential (*dunamei*) is one thing, power (*dunamis*) is another. Also being actual (*energeiai*) is opposed to being potential, and actuality (*energeia*) to power. Power is a complete preparedness of substance and an unimpeded readiness for activity (*energein*), one that confers actuality (*energeia*); but what is potential is an incomplete suitability (*epitêdeiotês*) for being what it is said to be potentially, one that receives its actuality (*energeiai*) from something else and does not project (*proballousa*) it from itself; but what is actual (*energeiai*) is that which can already be active (*energein*) in the way in which it is named. For he is actually (*energeiai*) a man who is already active (*energein*) in virtue of the form of man. The actuality (*energeia*) opposed to a power is the active (*energos*) change that is projected (*proballomenê*) from the power; the active (*energos*) [change] is [the change] that is in the action (*ergon*), while action (*ergon*) is making and doing (*poiêsis kai praxis*). And from the power which remains internal and is not manifest the word 'potential' was derived which is observed only in the suitability of the substance (*en epitêdeiotêti*), as if it were a disposition (*diathesis*) of the substance itself. And from 'actuality' (*energeia*) 'actual' (*energeiai*) was derived, again according to the substance regarded as active (*energos*). JOU

Perfect *dunamis* is active:

(2) Proclus *ET* 78

For the potency which brings to actuality (*energeia*) is perfect, since through its own activities (*energeiai*) it makes others perfect, and that which can perfect others is itself more greatly perfect. But that potency which needs some extraneous presubsistent actuality (*kat'energeian* prop. 77), the potency in virtue of which a thing exists potentially, is imperfect. For it needs the perfection which resides in another in order to become perfect by participating it; in itself, therefore, such a potency is imperfect. Thus the perfect potency is that which resides in the actual (*kat'energeian*) and breeds new actuality; the imperfect is that which resides in the potential and derives its fulfilment from the [actual]. ERD

(3) Proclus *PT* 3.8, 34,8-11 Saffrey-Westerink

But there power (*dunamis*) generates everything, whereas the power of matter is imperfect and lacks the reality (*hupostasis*) which makes all things actual (*kat'energeian*). RRKS

(4) Proclus *PT* 3.10, 40,12-23 Saffrey-Westerink

And the unlimited indeed in this is imperfect power (*dunamis*), while the limit is form and shape of this power. On this account we establish this power to be matter, since it does not possess being according to actuality (*kat'energeian*) and requires something else to determine it. We no longer however say that it is right for the power of being to be called matter, since it [the power of being] is generative of actualities (*energeiai*), produces all beings from itself, and is determinative of the perfect powers in beings. For the power of matter, which is imperfect, imitates the function of that thing [the power of being] in a different way; and since it is potentially plurality, it creates a likeness of the pangs of giving birth to plurality in it [the power of being]. JE

Reading

E.R. Dodds, *Proclus, The Elements of Theology*, Oxford 1933, *ad ET* 78.
S. Gersh, *Kinêsis akinêtos: A Study of Spiritual Motion in the Philosophy of Plotinus*, Leiden 1973, 43-8.
A.C. Lloyd, 'Neoplatonic logic and Aristotelian logic', *Phronesis*, 1955-6, 68.
A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, 81-2; 105.
F. Romano, R.L. Cardullo, eds, *Dynamis nel Neoplatonismo*, Florence 1996.
Lucas Siorvanes, *Proclus*, Edinburgh 1996, 102-3.

6. Particulars

6(a) Forms of individuals in Aristotle

That Aristotle believed in particular forms of individuals, especially of persons, is argued e.g. by Albritton, Heinaman, Lloyd. Aristotle is cited as speaking of 'what it is to be you' and 'what it is to be Socrates' (*to soi einai, Sôkratei einai, Metaph.* 7.4, 1029b14-15; 7.6, 1032a8). So far it sounds as if particular forms of individuals would be distinct only numerically, not in other ways. This raises the question whether they are somehow numerically distinct in their own right, or because of being housed in different bits of matter. It is matter, not form, which makes Socrates and Callias different individuals, according to Aristotle *Metaph.* 7.8, 1034a5-8. If the particular forms are instances of the same universal form, a further question arises as to what sort of unity and status the universal form has.

David Balme ascribes to Aristotle forms of individuals which are particular in a quite different way. He draws attention to Aristotle's discussion of individual resemblances in offspring to the father's or mother's side, *GA* 4.3. Balme's suggestion that these constitute individual form (767b30-3 speaks of essence, *ousia*, rather than form) has been doubted (Witt), but Coles draws attention to *GA* 4.1, 766a20, which may mean that the male parent produces a female,when he does not bring the matter over into his own distinctive form (*to idion eidos to hautou*). On Balme's view, the individual's form is not an essence, but contains *non-essential* characteristics like colour of eye or hair and snubness of nose, which are discussed in *GA* 4.3. Its differentiation would depend on matter in a different way, namely that the non-essential characteristics constituting the individual's form would be due to matter.

Alternative suggestions are that Aristotle's form should be described as neither particular nor universal (Charlton), or that forms are not to be described as one in any way; rather, things can be one *in* form (Lennox).

For Alexander often treating forms as non-universal, see **5(e)** above.

Reading

Roger Albritton, 'Forms of particular substances in Aristotle's *Metaphysics*', *Journal of Philosophy* 54, 1957, 699-708.

David Balme, 'Aristotle's biology was not essentialist', in Allan Gotthelf, James G. Lennox, eds, *Philosophical Issues in Aristotle's Biology*, Cambridge 1987, 291-312.

W. Charlton, 'Aristotle on identity', in T. Scaltsas, D. Charles, M.L. Gill, eds, *Unity, Identity and Explanation in Aristotle's Metaphysics*, Oxford 1994, 51-3.

Andrew Coles, *Matter, Life and Organisation: Biological Themes in Philosophy and Medicine in Ancient Greece*, PhD diss., University of London 1992.

Robert Heinaman, 'Aristotle's tenth aporia', *Archiv für Geschichte der Philosophie* 61, 1979, 249-70.

J.G. Lennox, *Aristotle's Philosophy of Biology: Studies in the Origins of Life Science*, Cambridge 2001, 142.

A.C. Lloyd, *Form and Universal in Aristotle*, Francis Cairns, Liverpool 1981, 50.

R.W. Sharples, review of Lloyd, *Liverpool Classical Monthly* 7.1, 1982, 15-17.

R.W. Sharples, 'Alexander of Aphrodisias', *Aufstieg und Niedergang der römischen Welt* 2.36.2, 1987, sec. 8.
Charlotte Witt, 'Form, reproduction and inherited characteristics in Aristotle's *Generation of Animals*', *Phronesis* 30, 1985, 46-57.

6(b) The individual as a unique bundle of characteristics

If Aristotle postulated such a collection of distinctive characteristics in the individual as Balme suggests in **6(a)**, they would still have to be embedded in *matter*. So the individual would not simply *consist* of such a collection, without matter. When, therefore, Porphyry expresses the latter idea at *Isag.* 7,19-8,3, calling the distinctive characteristics *idiotêtes* (Latin *proprietates*), I believe he is drawing not on Aristotle, but on Plato. Plato, *Theaetetus* 209C, speaks of an individual (*atomon*), such as Socrates, consisting of uniquely distinctive characteristics (the word *idios* is used earlier at 154A, 166C), such as his distinctive snubness of nose. Plato has the idea that one cannot think of Theaetetus at all without having his distinctive characteristic in mind. In Porphyry what is unique may be a bundle (*athroisma*, a word used at Plato *Theaetetus* 157B-C, or *sundromê*) of characteristics, rather than a single one, and for Porphyry it is unique in the strong sense that it *would* (*ouk an*) not belong to another individual. Boethius *in Isag.*[2] was inaccurate when he translated this merely as 'will not' (*erit*).

The idea that honey should be considered a bundle, *athroisma*, of qualities is picked up from the *Theaetetus* by the Middle Platonist Alcinous, *Didaskalikos* ch. 4, 156,1-11, translated in **Psychology 1(a)**.

The Stoics borrowed from Plato the idea of uniquely distinctive characteristics (*idiotêtes*, Latin *proprietates*) for each individual. But they are not so relevant because, like Aristotle, they kept the idea of matter, which they called substance (*ousia*), as the subject of qualities, and did not follow Plato in making the individual consist of a bundle of qualities only. So Porphyry was Platonising, unless he was able to find these ideas in the Aristotelian Alexander.

I doubt if Simplicius can be trusted, when he says, *in Cat.* 83,16-20, that Alexander did think of individuals as constituted (*huphestanai ek*) out of characteristics. It is true that in *Quaest.* 7,32-8,5, translated above under **5(e)**, Alexander postulates distinctive characteristics (*idia*) for individuals. But it is a further question whether he also spoke of constitution out of nothing but characteristics, or whether Simplicius read this into him. Simplicius, I believe, could have been misled by Porphyry.

Because Porphyry's work was presented as an introduction to many of Aristotle's ideas, the notion of the individual as a unique bundle of characteristics was taken by Proclus and Simplicius, and possibly by Philoponus, as representing the Aristotelian view, despite the lack of any reference to matter, or a subject for the characteristics to inhere in.

But why should Porphyry have offered the *Theaetetus* and Alcinous' view of individuals in an Introduction to Aristotle? I suspect because he is speaking to beginning students who are about to read Aristotle's *Categories*, which does not even mention matter and form, so Porphyry does not want to go into those complications. Alcinous' treatise is also an introduction, albeit an introduction to Plato, not like Porphyry's to Aristotle, so Porphyry has a precedent. If, moreover, Porphyry read Aristotle in the same way as Balme, then the idea of distinctive character still would have seemed Aristotelian to him, even if not the idea of the individual as bundle. Porphyry was not to know that Proclus and Simplicius would wrongly infer that the view was Aristotelian. For different explanations, see

Mansfeld and Chiaradonna. But the view that the treatment of individuals in Seneca *Letter* 58.12 is ascribed to Aristotle, rather than being Stoic, incurs the difficulty that the other ideas in that passage are clearly un-Aristotelian.

There is a further question, as Avicenna pointed out (*al-Madkhal* 15,1-6, translated by Bäck, with Latin version from *Logica* 2r, col. 2), how it can be that the bundle of characteristics unique to Socrates *would* never be (so Porphyry and Proclus), rather than merely happening not to be, shared. It would not be satisfactory to reply that the characteristics are themselves individuated as belonging to Socrates, if they are needed for the opposite role of showing how Socrates is individuated. But the unshareability is nonetheless important, if one is to avoid the possibility of Socrates being reduplicated, which is the threat to personal identity posed in modern examples of individuals being subjected to fission.

Two further ideas should be distinguished from the idea that the individual is a unique bundle of characteristics. First, Plotinus was described above under **3(d)** as thinking of Aristotelian substance as a conglomeration (*sumphorêsis*) but one including matter as well as qualities, 6.3 [44] 8 (19-37). Secondly, Gregory of Nyssa is described in **Physics 7** as maintaining in three works that bodies are bundles (*sundromai*) of God's ideas.

Boethius left a complete Latin translation of Porphyry's *Isagoge*, which is used also, but only incompletely, in his second commentary on that work.

(1) Plato *Theaetetus* 209C

But I think there will not be in me an opinion about you, Theaetetus, until this snubnosedness of yours has stamped and deposited in me a reminder that is different from the other snubnosednesses that I have seen, and the same with the other [characteristics] of which you consist (*t'alla ex hôn ei su*). RRKS

(2) Alexander *ap.* Simplicium *in Cat.* 83,16-20

Perhaps Alexander has this in mind when he thinks that [the common feature] is posterior to individuals. Nevertheless, he does not preserve consistency with his own account, when he says that the individuals are constituted (*huphestanai ek*) out of the common feature (*to koinon*) and the differences, unless perhaps he considers their constitution (*hupostasis*), too, in the conceptual mode (*kata tên ennoian*) which yields the definition and exposes the common feature. FDH

(3) Porphyry *Isag.* 7,16-24 from the Greek

What is most generic is said of all the genera, species and individuals under it, while the genus prior to the most specific species is said of all the most specific species and the individuals, the mere species is said of all the individuals, and the individual (*atomon*) is said of only one of the particulars (*ta kata meros*).

Socrates is called an individual, and so is this white thing and this son

of Sophroniscus who is approaching (if Socrates is Sophroniscus' only son). So things like this are called individuals because each is composed of distinctive qualities (*ex idiotêtôn sunestêken hekaston*), the conglomeration (*athroisma*) of which would never (*ouk an pote*) come into being identically in anything else. For the distinctive qualities of Socrates would not come into being identically in another particular. RRKS

(4) Porphyry *Isag.*, last two sentences above in Latin translation by Boethius, at Busse *CAG* 4.1, 33,4-7 (also used in Boethius *in Isag.*[2], *CSEL* 48, p. 235 Brandt)

Things of this kind are called individuals because each of them consists of (*consistit*) distinctive characteristics (*proprietates*) the collection (*collectio*) of which will (*erit*) never be the same in any other. For the distinctive characteristics of Socrates will never be the same ones in any other of the particulars whatever. RRKS

(5) Proclus *ap.* Olympiodorum *in Alcibiades 1* Westerink 204,8-12

The Peripatos was wrong about the individual (*atomon*), for it thought that the individual came into being out of (*ginesthai ek*) the concurrence (*sundromê*) of accidental properties (*sumbebêkota*). This is why it defined the individual as: that whose conglomeration (*athroisma*) would never come into being in anything else. Thus they tried to put together the better things out of (*epoioun apo*) the worse, that is, out of accidental properties. RRKS

(6) 'Philoponus' *in An. Post. 2* 437,21-438,2

Sense perception sees Socrates and Alcibiades, and takes an impression not only of the particular distinctive qualities (*merika idiômata*) in them (the particular distinctive qualities are one man's being long-haired and pale, the other not), but also of something of the shared characteristics that it finds in them, that is, their being animals, or rational, or something of that sort. It then sends this along in the first instance to the imagination ... For sense perception grasps not only particulars (*merika*), that is, the accidental (*sumbebêkota*) and distinctive qualities (*idiotês*) of which the particulars consist (*ex hôn sunestêkasin*), but also the universal man, that is, some of the things of which the universal man consists (*sunistatai*). RRKS

Reading

Allan Bäck, 'The Islamic background: Avicenna (b. 980; d. 1037) and Averroes (b. 1126; d. 1198)', in Jorge J.E. Gracia, ed., *Individuation in Scholasticism*, Albany, NY 1994, ch. 3.

Jonathan Barnes, *Porphyry, Introduction*, Oxford 2003, 342-5.

Riccardo Chiaradonna, 'La teoria dell' individuo in Porfirio e l'*idiôs poion* stoico', *Elenchos* 2000, 303-31.
Jorge J.E. Gracia, *Introduction to the Problem of Individuation in the Early Middle Ages*, Munich & Vienna 1984, ch. 2, 'Formulation of the issues: Boethius'.
A.C. Lloyd, 'Neoplatonist logic and Aristotelian logic', *Phronesis* 1, 1955/6, 158-9.
A.C. Lloyd, *Form and Universal in Aristotle*, Liverpool 1981, 67-8.
A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, p. 46.
Jaap Mansfeld, *Heresiography in Context*, Leiden 1992, 92-8.
Richard Sorabji, *Matter, Space and Motion*, London & Ithaca, NY 1988, ch. 4.

6(c) Individuals treated like species

The Stoic idea of an individual's distinctive characteristic (*idiotês*) enables Porphyry to take the further view, which is also Stoic, that an individual can be treated like a species. Just as a species is defined by genus and differentia, so Socrates falls under human, which thus acts like a genus, and is differentiated by his distinctive characteristic. Again just as a species is said of individuals, so an individual (*atomon*) is said of one particular (*to kata meros*), as we have just seen in Porphyry *Isag.* 7,16-19. The scheme which treats individuals like that came to be known as the 'tree of Porphyry', and was very influential. But the idea that the individual is the most specific kind of species, had already been made explicit by the Stoics themselves, according to Diogenes Laertius 7.61. As Mansfeld points out a similar view may also be expressed in the Stoic Seneca, *Letter* 58.12, and with names favoured by the Stoics (Dion, Theon) in Sextus *Math.* 8.41 and 338. Cf. **5(g)** for individuals treated as parts of species by analogy with species as parts of genus.

(1) Diogenes Laertius *Lives* 7.61

The species is what is embraced by the genus, as human is embraced by animal. Most generic is that which, while being a genus, does not have a genus, e.g. the existent. Most specific is that which, while being a species (*eidos*), does not have a species, e.g. Socrates. RRKS

(2) Porphyry *Isag.* 7,16-19

What is most generic is said of all the genera, species and individuals under it, while the genus prior to the most specific species is said of all the most specific species and the individuals, the mere species is said of all the individuals, and the individual (*atomon*) is said of only one of the particulars (*ta kata meros*). RRKS

Because Porphyry put this idea of individuals as species in his introduction to Aristotle, it too, like the idea of the individual as a bundle, came to be accepted as Aristotelian. But in fact the idea that an individual can be '*said of*', or predicated of, anything appears to contradict Aristotle. The *species* man is 'said of' Socrates (Aristotle *Cat.* 2a11-b6) in the technical sense that not only the name 'man', but also the definition (mortal, rational animal) can be predicated of Socrates. But the individual Socrates has no definition, according to Aristotle, and so cannot be 'said of' anything in the technical sense. Can Socrates be in some looser sense predicated of anything? Aristotle discounts as either no predication at all, or a merely acciden-

tal predication, such cases as 'the approaching thing is Socrates' (*An. Post.* 1.22, 83a1-23).

Reading
Jaap Mansfeld, *Heresiography in Context*, Leiden 1992, 92-8.

6(d) What differentiates individuals?

The three answers, distinctive qualities, place and matter, sound very different from each other. I shall suggest that they are closely interrelated, and that it should be no surprise to find the same philosopher or school backing more than one candidate.

(i) Distinctive qualities

Porphyry is evidently committed to saying that individuals are distinguished from each other by a distinctive bundle of characteristics. Boethius agrees, saying that these are accidental characteristics not communicable to another individual. He maintains (*Trin.* 1,24-31) that if other accidents could be removed, there would still be the difference of place, which is an accident. He coins the rather unhelpful word 'Platonicity' to describe the distinctive characteristic.

Whereas Boethius *in Isag.*^{2} records Porphyry as saying, and itself says, merely that the distinctive characteristics are not, or will not be shared, Boethius *in Int.*^{2} says that the distinctive characteristic (now singular, but perhaps still a bundle) is *not shareable* (*incommunicabilis*). And this fits with Porphyry's original claim in *Isag.* 7,16-24 that the *athroisma would* never come into being identically in anything else. The Stoics are likely to have agreed that the distinctive characteristics *cannot* be shared, if their distinctive qualities afforded the sage *infallible* powers of discriminating individuals, and if one was not to be at risk of losing one's identity through someone else coming to share one's previously unique quality. One suggestion (by Eric Lewis, *Phronesis*, 1995) is that each individual person has an unshareable psychological perspective whose physical basis is the distinctive quality.

(1) Porphyry *in Cat.* 129,8-10

[Nor] are they [state and condition (*hexis, diathesis*)] differentiated from one another in number, as Socrates differs from Plato: for Socrates does not differ from Plato in virtue of specific differentiae, but in virtue of a distinctive combination of qualities (*idiotêti sundromês poiotêtôn*), in virtue of which Plato differs from Socrates. SS

(2) Boethius *in Isag.*^{2} 235,5-236,6, *CSEL* ed. Brandt

Since above he used the expression 'individual' (*individuum*) he tries to give an account of this word. Those things only are divided which are common to more things than one: for each is divided among those things to which it is common and the nature and likeness of which it contains. Those things into which something common is divided share in a common nature and what is distinctive of (*proprietas*) the common thing belongs to

these things to which it is common. But what is distinctive of an individual is not common to anything. What is distinctive of Socrates, if he was bald and snubnosed and had a pot belly, other lineaments of body, cast of character or sound of voice, did not belong to anyone else. For these distinctive characteristics (*proprietates*), which came to him from accidents and joined to make up his form and figure, belonged to no one else. And since a thing's distinctive characteristics belong to nothing else they cannot be common to anything; and if a thing's distinctive characteristic is not common to anything there is nothing which shares it. If a thing is such that nothing shares its property, it cannot be divided into those things that do not share. Rightly, then, the things whose distinctive characteristic does not belong to anything else are called 'individuals' (*individua*). But what is distinctive of human, that is, the species, belongs to Socrates and Plato and the rest, whereas their distinctive characteristics, since they come from accidents, in no way belong to any other single thing whatever. WC

(3) Boethius *in Int.*[2] 136,17-137,26 Meiser

For we see that there are some qualities in things of this kind that cannot belong to anything other than some one single and particular substance; for one kind of quality is particular (*singularis*), e.g. to Plato or Socrates; there is another which is shared with more than one and gives its entire self to individuals and to all, e.g. humanity itself. For there is a quality of this kind that is both whole in individuals and whole in all. For whenever we think of something like this in our mind, in our mental processes we are not led by this name to any single person, but to all who share in the definition of humanity. Hence it comes about that this is common to all, but the former cannot be shared (*incommunicabilis*) with all but is distinctive (*propria*) of one. For if I may coin a new word I would call the single particular quality which cannot be shared with any other substance by an invented name to make clearer exactly what I mean. Let us call that distinctive characteristic (*proprietas*) of Plato that cannot be shared Platonicity. By inventing a word we can call this quality Platonicity in the way in which we call the quality of a man humanity. And so this Platonicity belongs to only one man and that not to anyone you like but only to Plato, whereas humanity belongs to Plato and to all the rest who are embraced by this word. And so it happens that because Platonicity belongs only to Plato, the listener's mind refers the word Plato to one person and one particular substance, but when he hears 'man' he refers the concept to as many as he knows are embraced by humanity. And so since humanity is both common to all men and is whole in the individuals (for all men have humanity to the same extent as one man; for if this were not so, the definition of the species man would never belong to the substance of a particular man), man is said to be something universal, whereas Platonicity and Plato are particular. AS

(4) Boethius *in Int.*[2] 139,18-19 Meiser

Therefore Platonicity itself is a quality that, as they put it (*ut dictum est*), is unshareable (*incommunicabilis*). RRKS

(5) Boethius *On the Trinity* 1, lines 24-31

But it is the diversity of accidents that produces numerical difference. For three men are distinct (*distare*) neither in genus nor in species, but by their accidents. For even if we should in our mind remove all accidents from them, nonetheless each would have a different place. We cannot in any way imagine that to be one and the same, since two bodies will not occupy one place, and place is an accident. They are plural in number because they are made plural by their accidents. RRKS

(6) Simplicius *in Cat.* 229,17-18

No distinguishing set (*idiazon plêthos*) bundles together (*sundramein*) to produce a numerical distinction (*diastasis*). RRKS

(ii) Place

Dexippus, though often drawing on Porphyry, rejects the distinctive characteristics answer, and suggests instead that in order to be distinct individuals, things need to be countable and that means being separated, *diestêkota*. This agrees with the stress on place as differentiating found just above in Boethius (*Trin.* 1.24-31) and shortly below in the Stoic Posidonius. Unfortunately, the Neoplatonists, as detailed under **Physics 20**, allow a number of things to be in the same place after all; soul vehicles, celestial spheres, certain lights, space viewed as a kind of light, and certain daemons.

(7) Dexippus *in Cat.* 30,20-34

Seleucus: But if a species is that which is predicated of a multiplicity of numerically different entities in the mode of essence (*ti esti*), in what way does one thing that is individual and one differ from another thing that is individual and one? For both the one and the other are numerically one.

Dexippus: Those who seek to solve this problem by reference to the concept of 'distinctively qualified object' (*idiôs poion*), i.e. by claiming that one person, for instance, is definable as 'hook-nosed', 'fair-haired', or by some other conjunction of qualities, another as 'snub-nosed' or 'bald' or 'grey-eyed', and another again by other qualities, do not seem to me to solve it properly. For it is not the conjunction (*sundromê*) of qualities which makes them differ numerically, but, if anything, quality as such. We should rather reply to the problem as follows, that things that are numerically distinct (*hetera*) do not differ (*diapherein*) from each other in nature and essence, but their distinctness resides in their countability. They are

different, then, in being countable; for it is in the process of each being counted one by one that number arises. So, it seems to me that to say that things are numerically different implies 'separate (*diestêkota*) so as to be countable', so that what is being said about the species is somewhat as follows, that the species is what is predicated of a multiplicity of entities separate so as to be countable, so that we may take 'different' in the sense of 'separate'. JD

(iii) Matter

Aristotle in *Metaph.* 7.8 says that Callias and Socrates are distinguished from each other by matter, by having *this* flesh and *these* bones. It is not denied that they are alike in being made of flesh and bone. So the commentators sometimes take matter to be relevant as being the seat of other distinguishing characteristics. In that case, differentiation by matter (iii) is the same as differentiation by distinctive qualities (i). Moreover, Boethius sees place (ii) as just an instance of distinctive accidents (i). Finally, if Balme's account of Aristotle's individual form is right, this form is merely a set of accidents due to matter, and so again is not a distinct alternative.

The answer of Alexander on behalf of the Aristotelian school was that it is matter (*hulê*) or material circumstances (*hulikai peristaseis*) which individuate individuals like Socrates, and the matter presumably houses the distinctive characteristics (*idia*) to which he also refers, *Quaest.* 7,32-8,5 (see below). The appeal to matter is still upheld in late Neoplatonism by Ammonius.

(8) Aristotle *Metaphysics* 7.8, 1034a5-8

Once we have the whole, such and such a form in this flesh and bones, this is Callias or Socrates. They are different because of the matter, for this is different, but are the same in form, for the form is indivisible. RRKS

(9) Alexander(?) *Quaest.* 1.3, 7,32-8,5, translated in **5(e)** above

(10) Alexander *DA* 85,15-20, translated in **5 (e)** above

(11) Alexander *in Metaph.* 216,2-3

For the differences between particular men are material. AM

(12) Ammonius *in Isag.* 60,16-21

Of those [spoken sounds, *phônai*] predicated substantially some are said of things differing in species, viz. genera and differentiae, and some of things that differ numerically, viz. the [ultimate] species of individuals which differ from each other not in species but in matter – for instance I say 'horse' of Xanthus ['Chestnut'] and Balias ['Dapple']. WC

Reading

A.C. Lloyd, *Form and Universal in Aristotle*, Liverpool 1981, 65; 67-8.
A.C. Lloyd, *The Anatomy of Neoplatonism*, Oxford 1990, 46.

(iv) The Stoics on all three

The Stoics influenced Alexander and the Neoplatonists, because they accepted all three modes of differentiation: distinctive qualities, place and matter.

Stoics: distinctive qualities
The Stoics believed, following Plato *Theaetetus* 209C, that each individual had a distinctive quality to distinguish it from other individuals. In this they were followed by the Christians Origen and Basil (see **7(e)** below). In debate on the sage's infallibility, the Stoics insisted against Platonist scepticism that the Stoic sage had a way of distinguishing individuals, because the distinctive quality meant that no two individuals were ever exactly alike, Plutarch *Com. Not.* 1077C (= Long and Sedley 28O), Cicero *Acad.* 2.85 (= Long and Sedley 40J). Compare below under **7(e)** the Stoic view that a proper name indicates a distinctive quality (*dêloun idian poiotêta*), Diogenes Laertius 7.58. Ships and armies, we are told, do not have sufficient unity to be the bearers of qualities, although they are 'qualified', and so presumably can be distinguished, Simplicius *in Cat.* 214,24-31, translated below under **6(h)**.

It is not clear that the Stoic distinctive quality was, like the Neoplatonist one, a *bundle* of commonly shared qualities. As Eric Lewis points out, that would make it hard for the Stoic sage to be sure he or she had correctly identified an individual. Would no other individual ever possess just this bundle? Would this individual continue to possess it?

(13) Plutarch *On Common Conceptions* 1077C

So one can hear [the Stoics] and encounter them in many writings disagreeing with the Academics shouting that they confuse all things with their 'indistinguishabilities' (*aparallaxiai*), and force a single qualified individual to inhere in two substances. And yet there is no human being who does not think this and hold it on the contrary to be amazing and paradoxical, if in the whole of time there has not come to be one dove indistinguishable from another, nor one bee from another bee, nor one grain of wheat from another, nor one proverbial fig from another. RRKS

Dexippus in passage (7) just translated, *in Cat.* 30,20-6, is taken by some to be referring to the Stoics (though his source may merely be Porphyry's *Isagoge*), when he rejects the view of 'some people' that the individually qualified object (*idiôs poion*) is distinguished by a concurrence (*sundromê*) of properties, none of which is *on its own* unique. But Eric Lewis has rightly asked why a bundle of the type Dexippus mentions *could* not be shared, why its members *could* not be lost, and how anyone could tell what bundle was unique to an individual. I have mentioned his rival suggestion that, at least for conscious things, the soul with its unsharable psychological perspective is the unique quality. For the Stoics, an individual's soul is his or her *pneuma* (air and/or fire) disposed in a certain way (Plotinus 4.7 [2] 4; Porphyry *DA ap.* Eusebium *PE* 15, 13C = *SVF* 2, p. 146, line 23 and 223.1), and under the Stoic scheme of categories, qualities are also *pneumata* (Simplicius *in Cat.* 217,36-218,2; Plutarch *Sto. Rep.* 1054A = *SVF* 2.389 and 449).

Stoics: place
It is a further feature of the Stoic view in Posidonius, and this time Dexippus agrees, that two different (*hetera*) individuals must be separate in place, even though in chemical mixtures, according to the Stoics, the ingredients can be in the same place. Nor can one be *part* of the other, and 'part' here includes co-extensive parts like the matter (*ousia*) of a thing.

(14) Posidonius in Stobaeus 1, 178,21-179,8 Wachsmuth (= Arius Didymus fr. 27, *Dox. Gr.* 462,25ff. = part of Posidonius fr. 96 Edelstein and Kidd = Long and Sedley 28D9ff.).

[Posidonius] says that the distinctively qualified thing (*to poion idiôs*) and the substance (*ousia*) out of which it is [constituted] are not the same, but are not different either, merely not the same, because the substance (reading *ousian*) is part of the distinctively qualified thing and occupies the same place, whereas things that are said to be different from others must also be separate from them in place, and not seen as part of them. Mnesarchus says it is clear that a thing viewed as distinctively qualified and a thing viewed as substance are not the same, because things that are the same must have the same attributes. RRKS

Reading
Eric Lewis, 'The Stoics on identity and individuation', *Phronesis* 40, 1995, 89-108.
Stephen Menn, 'The Stoic theory of categories', *Oxford Studies in Ancient Philosophy* 17, 1999, 215-47.
David Sedley, 'The Stoic criterion of identity', *Phronesis* 27, 1982, 255-75.

Stoics: matter
The Stoics accepted differentiation also by matter. Chrysippus, the Stoic, is said to have replied to the 'Growing Argument', which makes growth tantamount to death, with a scintillating puzzle about the effects that that would imply for shrinking. Chrysippus' argument will be studied under **6(h)** below. But what is relevant here is that his reply starts from the premise that two distinctively qualified individuals cannot co-exist in the same substance (*ousia* = matter).

(15) Philo *On the Eternity of the World* 48 (= *SVF* 2.397)

First he [Chrysippus] establishes in advance (*prokataskeuazein*) that two distinctively qualified individuals cannot co-exist in the same substance (*ousia* = matter). RRKS

Reading
David Sedley, 'The Stoic criterion of identity', *Phronesis* 27, 1982, 255-75

6(e) Particular forms in Alexander

Alexander's view about the form (or nature) of animal at *Quaest.* 1.3, 7,23-8,17; 1.11, 23,25-31; 24,11-16; *in Top.* 355,18-24, is that any universality or sharedness is accidental to it, since 'animate being with sensation' remains the same whether

or not the form is shared. Moreover, insofar as it is universal, its existence is merely mental. Form is particular, not admittedly in itself since it is intrinsically neither, but insofar as it resides in an individual. See **5(e)** above along with *Quaest.* 1.11, 24,22, which, if authentic, commits him to a different view.

Reading

A.C. Lloyd, *Form and Universal in Aristotle*, Liverpool 1981, 50.
R.W. Sharples, review of Lloyd, *Liverpool Classical Monthly*, 7.1, 1982, 15-17.
R.W. Sharples, 'Alexander of Aphrodisias', *Aufstieg und Niedergang der römischen Welt* 2.36.2, 1987, sec. 8.
M.M. Tweedale, 'Alexander of Aphrodisias' views on universals', *Phronesis* 29, 1984, 279-303.

6(f) Particularity of unmoved movers in Alexander

The unmoved movers which move the eight transparent celestial spheres in Alexander need to be distinguished from each other, whether all eight move their spheres by being objects of desire, or whether seven of them are souls of spheres which move their spheres by desiring to imitate the first unmoved mover. Since they are not, like terrestrial souls, forms of bodies, they are not, for Alexander, distinguished by matter. In *On the Cosmos* he suggests they may be distinguished by a relation of before and after. As analogies he compares the relation of fire and a red-hot iron, and again the distinction of substance and the other categories.

(1) Alexander *On the Cosmos* 92-5 Genequand

[92] For in this way the thing around which the bodies move in a circle may endure eternally in species, since the forms of the movers may be many in number and differ from one another in species in a way that is not complete dissimilarity, but according to priority in substantiality and nobleness, as Aristotle has shown in his book of the *Metaphysics*, since nothing at all precedes these substances. Among these same substances which are higher and nobler than all other substances, there may be diversity by superiority and priority in nobleness in relation with one another. [93] It is fitting that not everything that is lower than something else should be so merely by sharing in the thing opposite to it; the flame of the fire, though it is less hot than red-hot iron, is not so by being mixed with coldness, and the body that is less fertile is not necessarily so by sharing in some lowly disposition. [94] Let us posit that the noblest of these things and the most deserving to be the first is the mover of the sphere of the fixed stars; through the latter it also moves the things moved by it; the following is the mover of the second sphere, and after it the mover of the third sphere, and so on with all the other things, so that the diversity existing between the spheres with regard to the slowness and velocity of their circular motion is due to the diversity of their moving causes. We have already described the situation concerning this diversity in the earlier part of our treatise. [95] As for the diversity among things which are incorporeal, it is not due to a body, as some people

have thought; for one cannot say that what is not a body is not different from what is not a body because it is not a body, insofar as the nature of the things which are not bodies is not one, just as we find it to be the case with the nature of bodies. This is shown by the genera which are predicated of substance. CG

Reading
Charles Genequand, *Alexander of Aphrodisias, On the Cosmos*, Leiden 2001, Introduction.

6(g) Forms of individuals in Plotinus

See **18(b)** below

6(h) Persistence over time

So far, the discussion has been about distinguishing individuals from each other, but there is another question, what makes an individual the same individual over a period of time. Before Plato, the comic playwright Epicharmus (if the text is his) entertained the idea of growth as destroying the former person, and the philosopher Heraclitus postulated that the flux of things is so great that one cannot step into the same river twice, nor touch the same mortal substance twice. But Plato in the *Theaetetus* developed this idea in such a way as to represent it as unintelligible, thereby reasserting a certain degree of stability. The account that follows begins with his pupil Aristotle. There are two key passages in Aristotle in *GC* 1.5 and *Physics* 5.4.

(i) Biological growth in Aristotle

Although biological growth had been taken since Presocratic times to create a problem for the persistence of the individual, Aristotle's problem in *GC* 1.5 is a special one (321a7-9; 18-22; b10-16). He thinks that in some sense every part whatsoever of the growing thing is increased by the incoming nutriment, but yet that two bodies cannot be in the same place. His solution invokes the form (the form, that is, of the *body* and indeed of the *individual* body). The accession is not to every part of the matter, but to every part of the form (b22-8; 32-4). And he compares the form (b24-5; 322a28-33) to a tube (*aulos*) with water flowing through it. The tube both measures the volume of water and has the power (*dunamis*) actively to shape it. It is a self-preserving structure, and I take it to be quite unlike the form of the body which Aristotle *On the Soul* 2.1 identifies with soul. Thus when Aristotle says, 321b27-8, that the nourishment accedes to the *form*, it can hardly be the *soul* which is said to be receiving the nourishment. Rather, form is here equated with shape (*morphê*) and compared with a tube. Moreover, Aristotle will not want to anticipate in this context his analysis of soul. The only echo of soul-talk comes when Aristotle says that the form is a *dunamis*, for the soul is also a *dunamis*. The relevant *dunamis* may in each case be the capacity to maintain a certain shape or structure. But the form here might best be thought of as a perceptible structure which has the capacity to preserve itself. It is closer to the perceptible forms of which Aristotle sometimes speaks than to form as soul.

(ii) Biological growth in Alexander and Philoponus

Alexander repeats that growth is in form, not matter, *Mixt.* ch. 16, 235,23ff.; Alexander(?) *Quaest.* 1.5, and again compares form with a soft tube (*sôlên*), *Mixt.* 237,26-238,10. Philoponus calls it a tube made of skin (*dermatinos sôlên*, *in GC* 105,22-6; 107,28; cf. 108,13). Philoponus adds the comparison of a numerically single shadow falling on running water.

Alexander and Philoponus explain that the tube persists, even though different volumes of water flow through it, expanding or deflating it. Philoponus enters the caveat that form can persist, so long as the replacement of matter occurs bit by bit, not all in one go (*athroon*, 106,8), and this insistence on gradualness is ascribed to Alexander(?) in the Arabic version of *Quaest.* 1.5, 13,13-16, translated into German by Ruland, Göttingen 1981.

Although the solution does not require matter to persist, Philoponus comments (107,3-14) that there are two independent grounds for thinking that some of an animal's matter needs to persist for some reason or other. One ground is that if it could all be safely replaced, we should be immortal. Secondly, there is evidence for some matter remaining unchanged in the lifelong persistence of scars. The scars argument is ascribed to Alexander by Averroes, *Epitome of Aristotle on Generation and Corruption*, tr. Kurland, *Corpus Commentariorum Averrois in Aristotelem* (*CCAA*) 4.1, 117.

Alexander(?) *Quaestio* 1.5, 13,11-17, with Arabic paraphrase translated into German by Ruland, and Philoponus *in GC* 106,3-8, raise it as a question whether the bodily form would not perish, if the matter were completely replaced. In that case, not only would replacement need to be gradual, but the persistence of some of the original matter, for which evidence has just been cited, would become a necessary requirement. But the Arabic paraphrase and Philoponus both represent it as an answer to this question that gradualness is all that is required. Although, as Kupreeva points out, Philoponus *in GC* 118,24-28 does seem to make the stronger requirement that some *original* matter should persist, Alexander *Mixt.* 235,29-34 allows form to be preserved by exchange (*diadosis*) and does not seem to require more when he demands that some matter or flesh should persist. The stronger requirement, that some of the original matter should persist, would have corresponded to the more orthodox of the two Christian views of resurrection to be discussed below, which requires some of the original matter.

Averroes, however, not only reports it as Alexander's requirement that some matter should persist, but in the version translated by Kurland from Hebrew, Arabic and Latin, pp. 34-5 ascribes to Alexander a view incompatible with Aristotle's, that it is the matter that grows, *Middle Commentary on Aristotle's On Generation and Corruption, Corpus Commentariorum Averrois in Aristotelem* (*CCAA*), 3 vols, 4.1-2, text 38 *init.*, *ad* 322a1. But the medieval Latin version of the Arabic, ed. Fobes, pp. 48-9, lines 41-4, substitutes for 'grows' (*crescere*) 'increases in size' (*augmentari*), having warned that these are not the same, and in any case omits this sentence as present only in some Latin *mss.*, and has only the previous sentence, which harmlessly speaks of a *part* of the body *increasing in size*, without commenting on whether this is due to the *growth* of form or of matter. Further, the Latin is superior to the composite translation also in two other respects. First, the composite wrongly ascribes to Alexander the view that the growth must be by way of *mixture*. This is denied by Aristotle *GC* 1.10, 327b13-15; Alexander *Mixt.* 234,4-9, and Philoponus *in GC* 190,11-14, because in mixture all ingredients survive at least potentially, and all get larger, whereas in growth the incoming food perishes and cannot be said to expand. The Latin version of the Arabic shares in the composite's

misrepresentation only to the extent of a passing reference to the food's being mixed in (*admixtus*, line 46). Finally, the composite version warns that it is only giving the *gist* of Alexander, not his very words. Glosses are sometimes added to the text in Arabic versions and sometimes removed in Latin versions taken from Arabic.

The composite's misinterpretations about mixture and matter are easily explained. Concerning *mixture*, Aristotle raises it as a question whether the process of growth is due to mixture, and compares and contrasts the two, *GC* 1.5, 321a32-b10; 322a8-10; 322a31-3, in which Alexander follows him, *Mixt.* 238,17-19, These passages could be misread as interconnecting the two processes. As regards the idea that *matter* grows, it would be easy to overlook the distinction drawn by Alexander *Mixt.* 238,5-7 and Philoponus *in GC* 118,19-20 between growing or shrinking (*auxesthai, meiousthai*) on the one hand and merely in a looser sense getting larger or smaller (*pleiôn, elattôn genesthai, pleonazein*). The latter is allowed by Alexander, *loc. cit.*, to *matter*, and Philoponus agrees, *in GC* 108,10 and 15; 117,32; 118,1-2, as does the report by Averroes, *Middle Comm. in GC*, text 38, in the Latin version (*augmentari*). The former, growth, is confined by Alexander, *loc. cit.*, to *form*.

(iii) Biological growth in the Stoics and others

The problem of identity through biological growth had been intensified and pressed on the Stoics by Platonist sceptics. The Stoic answer is recorded in Stobaeus vol. 1, 178,10-179,17 (= LS 28D5-12), 'Simplicius' *in DA* 217,36-218,2 (= *SVF* 2.395; LS 28I). There are life-long characteristics in virtue of which a person is distinctively qualified. Moreover it is not the unqualified matter (here called the substance) of a person that undergoes growth, but the distinctively qualified entity itself, or the qualified part of it which is protected from losing its identity by the life-long qualities. The life-long quality was by the commentator 'Simplicius' given the Aristotelian name of 'form', *eidos* (the form, that is, of the person).

The life-long characteristic is probably meant to be distinctive in the strong sense that no one else *could* share it. That at any rate would be true of Neoplatonist theory, Porphyry *Isag.* 7,16-24; Boethius *in Int.*^{2} 136,17-138,19, and unshareability would help the Stoics, if the ability of the Stoic sage to tell any two individuals apart is meant to be infallible. Moreover, unshareability would protect someone from losing their identity through someone else coming to share their previously unique property. One suggestion (by Eric Lewis, *Phronesis*, 1995), already mentioned in **6(d)**, is that each individual person has an unshareable psychological perspective, whose physical basis constitutes the distinctive quality.

There had been a question, which was seen to be partly parallel, about an inanimate object, the ship of Theseus (Plutarch *Life of Theseus* 23), how it can persist, when all its parts have been replaced. Ships, according to the Stoics, do not have enough unity to be the bearers of genuine qualities, although in some sense they are qualified, Simplicius *in Cat.* 214,24-31. So the Stoics might well have thought that the ship of Theseus did not persist. Philoponus takes up slightly different inanimate examples at *in GC* 106,18-23; 109,13-18.

There is a summary of solutions to the problem of biological growth in Simplicius *in Cat.* 140,25-31, who reports that what persists may be any of the following: *ousia* in the sense of form, a distinctive quality, the secondary subject (i.e. not prime matter, but matter endowed with further completive properties as explained by Porphyry *ap.* Simplicium *in Cat.* 48,11-33, translated under **3(w)** above), or an indivisible, but composite essence involving both matter and form.

(iv) Can events or states return to existence?

Another context for discussing the persistence of individuals over time was the next life. But this involves a new issue: returning to existence after a temporal gap. So we must first consider something whose relevance has been shown by Eric Lewis, Aristotle's discussion in *Phys.* 5.4, 227b27-228b7, of whether events (*kinêseis, alloiôseis, energeiai*) or states (*hexeis, pathê*) can return to existence, and be numerically one with the earlier event or state. As emphasised by Simplicius *in Phys.* 886,23-6 and Themistius *in Phys.* 175,16-18, Aristotle does not allow this for events like walking, 227b29-32; 228a15-17; b1-7. Even though, as Simplicius says, 887,7-11, the same bed can be disassembled and reassembled many times from the same material parts, the assemblies and disassemblies are not the same.

W.D. Ross (commentary *ad loc.*) believes that Aristotle does not allow it for states like health either. The question is whether, when somebody regains his health, the later health is numerically one with the former. Aristotle, speaking of events or changes, says (228a3ff.), 'if it is possible for what has gone out of existence to come into existence again numerically one, this change too would be one change'. This does not on its own imply the impossibility of coming into existence again numerically one, but it does, if taken in combination with the denials that an event or change can. Does this mean that states like health can also not be numerically one after a disappearance? Probably, especially as Aristotle says, 'the principle is the same' 228a12, but a caveat concerning this particular example is that Aristotle does not necessarily count the disappearance of health as a non-existence. At any rate, in *EN* 7.14, 1154b17-19 he speaks as if recovery of health depends on something or other in the body remaining healthy (*hupomenein hugies*). It is the action of that part that makes recovery seem enjoyable (cf. 1152b34-36; 1154b1-2; *Metaph.* 7.9, 1034a12-13; 21). This fits with Aristotle's insistence in *On Youth and Old Age* that vital heat lasts lifelong.

We shall see under **(xi)** below a ban on states remaining the same in Plato *Symposium* 207C9-208B6, where Diotima denies that our knowledge remains the same. Knowledge is constantly being replenished by new memories of the same thing. This probably explains Porphyry's definition of memory in *Sentences* 15 (translated in **Psychology 2(f)**, as not preservation, but projection of newly rehearsed items.

Philoponus says in text (49) below that when you boil water and change it into air, even if fluidity persists (in a greater degree), it is a numerically different fluidity, and the heat in a mustard plant is numerically different from the heat in the seed from which it grew. Further (text (50)), when light is reflected off a surface, the activity reflected is numerically distinct from the activity originally received.

(v) The next life – Stoics and Alexander

Alexander, discussing the Stoic belief in the exact repetition of history (see **Physics 10** and **11**) objected that after an interruption we would not have numerically the same Socrates, even if the same matter was reassembled, for the interruption would prevent it being the same individual form (*atomon eidos*) *ap.* Philoponum *in GC* 314,9-22, the form, presumably, of Socrates. Alexander may here be following out the most natural interpretation of Aristotle's remarks on interrupted health, and applying those remarks to the case of form, even if his interlocutor will not apply them to matter (314,22). What the Stoics Zeno and Chrysippus are normally thought to have wanted is that in the next cycle of history, there would be numerically the same Socrates (Alexander *in An. Pr.* 180,33-6; 181,25-32; Tatian

To the Greeks ch. 5) performing actions that were qualitatively, but presumably not numerically, the same. Aristotle's discussion in *Physics* 5.4 would seem to make not only the actions, but also the form of Socrates, and hence Socrates himself, numerically distinct. Is Alexander's objection fair to the Stoics?

Alexander reveals (*loc. cit.*) that the Stoics thought in rather different terms, that the numerical identity of Socrates was secured (and secured despite minor accidental differences, for example in respect of freckles, Alexander *loc. cit.*; Origen *Against Celsus* 5.20) by the recurrence of Socrates' distinctive quality which probably no one else could share, as explained above in **(iii)** and in **6(d)**.

But would the distinctive quality need itself to be (like Alexander's individual form) numerically the same? Or would it suffice that it should be indistinguishable (*aparallaktos*) from Socrates' distinctive quality in the previous cycle of the universe? The distinctive quality of Socrates, for the Stoics, is the *pneuma*, i.e. the constantly replaced air and fire in Socrates, a part 'not other' than Socrates, and, on one interpretation, Socrates' soul with its distinctive perspective. It would be reasonable for the Stoics to require that the *pneuma* should be 'disposed', to use their term, in exactly the same way each time. But to require that the distinctive quality can make Socrates numerically the same only by itself being numerically the same, seems to threaten a regress or a circle. A regress will start, if it has to be numerically the same by itself possessing a distinctive quality of its own. A circle arises, if it has to be numerically the same by belonging to an individual (Socrates) that is numerically the same. It is simpler to suppose that, contrary to Alexander, the Stoics think the mere indistinguishability (*aparallaktos*) of the distinctive quality is enough to secure the numerical sameness of Socrates, whether or not it also secures the numerical sameness of the distinctive quality itself. If it does for independent reasons secure the numerical sameness of the distinctive quality, this may help to confirm the idea that it secures the numerical sameness of Socrates.

For reasons of epistemology, some Stoics held that if A and B were indistinguishable, they were one (otherwise the Stoic sage would fail to tell them apart). But this doctrine is applied to individuals, not to their distinctive qualities. Moreover, some Stoics were pushed perhaps by Alexander's objection that the individual form would not be the same, into allowing that it would not be Socrates in the next cycle, but only someone indistinguishable from Socrates (*aparallaktos*; Origen *Against Celsus* 4.68). Evidently these Stoics did not argue that the indistinguishability of individuals entails their oneness.

Yet other solutions were offered by some Stoics, probably under pressure from Aristotelians. It would be the same me in the next cycle. But would sameness of essence (*ousia*, in Simplicius' sense) be enough to make it numerically the same me? Or would the different location in time imply that there was a numerically different me in each cycle (Simplicius *in Phys.* 886,12-16)? This variant threatens the kind of reduplication of *me* that philosophers from Locke to Parfit have sought to avoid. The *unshareability* of the distinctive quality postulated by Porphyry and probably by the Stoics before him, would have avoided such reduplication *within* a world cycle.

Porphyry gave a verdict like Alexander's, but using Stoic terminology, about soul vehicles. When a new one is recruited at the next incarnation, the same individual one (*auta hekasta)* no longer exists; and its distinctive quality (*idiotês*) does not persist, *ap.* Proclum *in Tim.* 3.234,23-6, translated in **Psychology 12(c)**.

Aristotle's pupil Eudemus *ap.* Simplicium *in Phys.* 732,6-733,1, raised an objection against the theory of infinite repetition in its Pythagorean version, that has to do not with selfhood, but with time. On the Aristotelian definition of time as the number (or countable aspect) of events (*kinêseis*), the number, and hence the time, should be the same, so that there would not be a repetition after all. Actually, on

the basis of Aristotle *Phys.* 5.4, Eudemus should have recognised that the events would be numerically different after an interruption, but there might be a case for saying that their number would be the same.

One of the merits of the ancient Greek discussion is that it makes us consider separately, as we should, the numerical identity of individual persons, events, states and times.

(vi) The next life – Christians

Many Christian discussions focused on the resurrection of the body rather than on the continuation of the soul, which tended to be taken for granted, but not considered sufficient on its own. Controversy among Christians about their belief in resurrection had uncanny parallels with the controversy between Stoics and Aristotelians on eternal repetition, even though most Christians, unlike the pagans, tended to pay attention to matter rather than form. Many Christians thought that a resurrected person needed to have the same flesh, or some of the same flesh, as in this life. But, as Henry Chadwick has shown, the Christian Origen, at least in the texts reported and attacked by Methodius, considered another view was needed in order to meet pagan objections: why should we need the same organs? Isn't our flesh constantly being replaced in the present life? How could its elements be reassembled? Most tellingly: will not our flesh after we are dead pass through a chain of carnivores, some of them human, so that there will not be enough flesh for all the humans in the chain to be resurrected? This last argument in Origen (*ap.* Methodium *de Resurrectione*, ed. Bonwetsch in *GCS* 1.20.4), Porphyry *Against the Christians* fr. 94 Harnack, if genuine, and Augustine's cannibalistic version of it (*City of God* 22.12 and 20), repeated by Thomas Aquinas, are partly translated in **Psychology 8(e)**. The 'food chain' objection was already known to Athenagoras in the late second century AD (*On the Resurrection* 4.1-8.5), who answers optimistically that flesh is unnatural food which cannot be assimilated. Augustine (*City of God* 22.20, lines 25-39 *CCL* 48) offered the solution that if a cannibal eats you, both can be resurrected, since the cannibal can be reconstituted out of matter which he shed at an earlier date.

Thomas Aquinas discusses the cannibal problem in three works, *Commentary on Peter Lombard's Sentences, Book 4*, 44.1.2, Qa 4, arg. 4 and 5, *Summa Theologiae* Suppl. Q 2.80, article 4, and *Summa contra Gentiles* 4.81. The most important matter for one's resurrection is the seminal matter which came from one's parent's seeds. So the cannibal problem may seem more serious, if we imagine a cannibal who dines only on embryos. But all the seminal matter consumed by the cannibal would revert at the resurrection to the embryo victims, while the seminal matter which the cannibal needs is only that derived from his or her own parents. But what about the cannibal's child, whose seminal matter comes from embryo victims consumed by the parent? That too will be alright, because the victim embryos will have been constituted partly by non-seminal matter drawn from their mother's womb, and it is this non-seminal matter that can have turned into the seminal matter of the cannibal's child. Everyone should therefore be able to regain all of their seminal matter, and otherwise will need only to have their stature built up by matter that was at some time or other in their bodies.

The requirement of persisting matter has proved strenuous to defend. So perhaps we should return with relief to the very clever solution ascribed to Origen, which turns from matter to form. It is that resurrection bodies will not be of flesh, but will be pneumatic, made of air and fire (Methodius *Res.* 2.30.8; 3.18.1), the continuity being provided, as in the Aristotelian tradition, by the bodies having the

same form (*eidos*) as our earthly bodies (Methodius *Res.* 1.22.3-5; 3.3.4-5; 3.7.1). Augustine, while sticking to the orthodox Christian view that the resurrection body will be of flesh, nonetheless reminds us of Origen's talk of *pneuma*, spirit, when he calls the resurrection matter a *spiritual* flesh, *City of God* 13.22-3.

If Origen's appeal to form takes a leaf from Aristotle, Origen's opponent, the bishop Methodius, is in a way even more Aristotelian. He objects (*op. cit.* 3.6.7) that it cannot be the original (*auto to prôton*) form, given that the original body is replaced by a different one. Aristotle would agree that no state will be the same after a temporal interruption. Alexander, we have seen, says this against the Stoics as regards the person's individual form. Philoponus could be expected to agree as regards the bodily form, at least if the replacement occurs all at once (*athroon, in GC* 106,8), or if he follows Aristotle. Yet Philoponus himself takes the same view as Origen that humans are given a new body in the resurrection (Timotheus of Constantinople *de Receptione Haereticorum*, *PG* 86, 44A; 61C; Nicephorus Callistus *Ecclesia Historia* book 18, ch. 47, *PG* 147, 424D; Paul of Antioch in J.-B. Chabot, 'Documenta ad origines monophysitarum illustrandas', *Corpus Scriptorum Christianorum Orientalium* (*CSCO*) 17, Paris 1968, 330 (103, Louvain 1933, 230); John of Ephesus *Historiae Ecclesiasticae* part III *CSCO* vol. 106, Syriac Writers 55, 2.51, 85,26-35; 3.17, 106,12-16; cf. 5.5, 194,3-14, English translation by Payne Smith; Philoponus fr. 32 in Syriac with French translation in A. van Roey, 'Un traité cononite', where all the fragments are collected).

The best answer for Origen and Philoponus might be, in parallel with something said about the Stoics above, that numerical sameness of person does not require numerically the same bodily form, but at most a uniquely similar bodily form. To require numerical sameness of bodily form would be to threaten a regress or circle. We shall next see that even total similarity of form is not required, since accidental blemishes will be removed.

Origen might seem to face some special problems of his own. How can the bodily form be qualitatively the same, if the matter is not flesh, but *pneuma* and if, as he says *ap.* Methodium *Res.* 1.22.3-5, the bodily form is 'changed for the better', so that scars and freckles are removed? The first query is even suggested by Aristotle himself when he says that a soul cannot be inserted in a body of any type, *On the Soul* 1.3, 407b13-26. But the pneumatic body will have been designed by God to suit the future life of the human soul. Moreover, the scars and freckles simply echo the freckles which the Stoics allow to be added or subtracted in the next cycle, on the ground that they are accidental, not essential. And Origen knew he had Stoic backing, since he is one of the sources that reports the Stoic view on freckles (*Against Celsus* 5.20).

But there is one thing that Origen needs to retract, if he is to preserve the idea that the bodily form is, in all essentials, qualitatively the same. He needs to drop his further suggestion (Methodius *Res.* 1.7; 1.24; Jerome *Against John of Jerusalem* 25, *PL* 23.375) that we shall not have the same organs in the resurrection. Methodius points out that the shedding of organs contradicts the sameness of bodily form (*Res.* 3.7.1-7). Unfortunately for Origen, it is very plausible that the same organs will not be needed, unless the next life is very like this one. But Thomas Aquinas finds reasons for resurrected bodies to have hair and nails, which are adornments, and even genitals, since they belong to the human form, and manifest no longer used powers of the soul, *Commentary on Peter Lombard's Sentences, Book 4*, 44.1.2, Qa 1, resp. 1077a.

At this point, some philosophers would switch to relying on *psychological* rather than *bodily* links, to secure sameness of person in the next life. But in general Christians preferred a bodily link, and psychological links would be tricky, if life beyond death involves a radically different psychology, as it does, for example, for

Augustine, if his *Confessions* 12-13 intends to describe the saints in the heaven of heaven as shedding all memory and expectation, because rapt in contemplation of God. Origen also stressed that in the next life there will be no expectations arising from past marriage, *Commentary on Matthew* 22, 23-33 *GCS* ed. Benz and Klostermann, 669-72.

Origen has been defended by H. Crouzel, followed by Jon. F. Dechow, by saying that the bodily form (*eidos*) which Origen postulates is not, as Methodius takes it, the perceptible form and structure of the body. (I have called it a self-preserving structure). Crouzel is right insofar as he recognises that Origen does not mean by 'form of the body' what Aristotle means when he says that the *soul* is the (intelligible) form of the body (Aristotle *On the Soul* 2.1-2). Since the human soul, for Aristotle, is the same for all humans and does not distinguish one member of the species from another, Origen's bodily form must be something different. But Crouzel's difficult suggestion is that Origen's idea of bodily form is based on Platonic Form, Stoic creative seminal *logos* and also (though this sounds rather different) material substance. I feel rather uncertain how such a thing would individuate people. But, more important, Crouzel has overlooked the passage of Aristotle from which we started, *On Generation and Corruption* 1.5 and its extraordinarily close parallel to the account of bodily form supplied by Origen's spokesman in Methodius 1.25. 4-7. Just as Aristotle's bodily form is compared to a tube (*aulos*), so Origen's is compared to a wineskin (*derma, askos*), and both are said to change shape according to the volume of liquid passing through them. Moreover, Origen is represented as repeating the point we found in Aristotle that matter coming in from food avoids collision with what receives it, because what receives it is not matter, but form. It does not seem likely that Methodius charitably created so close a parallel to this less well-known passage of Aristotle, and ascribed it to Origen, without Origen ever having conceived of it.

So far we have seen the Aristotelian idea that sameness of (bodily or personal) form is required for persistence used by Aristotle, Alexander and Origen, and something analogous by the Stoics, while Aristotle, Alexander and Methodius alike seem to take this as excluding interruptions of matter.

(vii) The Platonist soul vehicle

The pagan soul vehicle, which carries the soul in this life as well as after death, thereby provides more continuity for the soul than the Christian resurrection body which is acquired only after an interruption. But some Christians accept the pagan vehicles, Boethius *Consolation* 3.9, Philoponus *in DA* 12ff. Origen himself mentions them as a Platonist postulate, *Against Celsus* 2.60, but, as reported by Methodius, he sees the resurrection body in the standard Christian way as acquired, unlike the Platonist vehicle, after an interruption.

(viii) The next life – Epicureans

Another group which may have attached importance to matter is the school of Epicurus. On the face of it, Lucretius seems to say that if after death our atoms were by chance reassembled in the same arrangement, the light of life would again be given to *us* (*nobis*). He repeats the reference to *us* when he says in the following lines (3.852-3) that we (*nobis, qui ante fuimus*) could also have been so assembled in the past, although he seems to lose the thread at 861-3 by speaking as if that would not in the future case be the same person (*ipse quoque esse*). Nonetheless, at

first he is clear about the future case, and his point about it is that any pain felt then should be of no concern to us now, since the memory of what was ours would have been broken off (*interrupta*; *vitai pausa*).

What does 'broken off' mean? Mere interruptions of memory are common, e.g. in sleep. So Lucretius might rather be thought to mean that we would have no memory of our previous life. It might be objected, however, that, given Epicurean materialism, if an adult Socrates were by chance to be reassembled, the same atoms in the same arrangement should yield the same memories. As regards a past assembly, then, the fact that we have no memories of it ought to cast doubt on its occurrence, while in case of a future reassembly, our memories should not be broken off. One reply about future reassembly, offered to me by Alan Code, is that with the scattering of our atoms, memory would not have been *retained* the way it is in sleep. Another reply, for which I thank Bob Sharples, is that such memories would not be recognised by us as being of the previous life, but would seem, illusorily, to be of the recent past. In either case, the memories would neither be genuine memories, nor a suitable basis for concern. The idea that concern may come apart from identity in the opposite direction (concern without identity) has been argued in recent times by Derek Parfit, *Reasons and Persons*, Oxford 1984, corrected edition 1987.

Insofar as Lucretius reverts at 861-3 to the idea that, with memory interrupted, it will not be us after all, he expresses a view more recently made familiar by John Locke. Such dependence of identity on memory is the opposite of the Neoplatonist position. In Neoplatonism, although the true self is often identified with intellect (see **18(a)** below), a view that Themistius *loc. cit.* below ascribes to Aristotle, intellect does *not* remember, because in Plotinus it is outside time (**Psychology 12(e)**). On one interpretation, the same subject is addressed by Aristotle *DA* 3.5, 430a23 'we do not remember'. See Themistius *in DA* 102,1-24, who explains that the productive intellect takes no impressions, while the passive intellect with which it is combined, dies. See also 'Philoponus' *in DA 3*, 541,20-542,5.

(ix) Perishing cannot be a merely relational change – Stoics

The Stoic Chrysippus discussed the individuation of persons and denied that two individuals with distinctive qualities, like the persons Dion and Theon, could occupy the same substance (*ousia*), i.e. matter, as seen under **6(d)** above He did so in a treatise replying to the Platonist 'Growing Argument'. That argument maintains that a new person replaces the old every time growth occurs, just as the number 7 is replaced, if it grows to 8. I follow in important respects the very ingenious interpretation of David Sedley, but I suggest two variations, each of which serves a purpose.

What Chrysippus offered in reply might be called the 'Shrinking Argument' (Philo *On the Eternity of the World* 48 (= *SVF* 2.397)). Suppose Theon has one foot missing. Suppose he then grows an extra foot. According to the Growing Argument, which insists on his destruction (*phthora*, Plutarch *Com. Not.* 1083B-C), he will perish and be replaced by a two-footed person – call him Dion. But then what if Dion's foot is amputated? The Growing Argument would expect that Theon would now come back into existence, just as 7 would return to existence, if 1 was subtracted from 8. But Chrysippus insists that Dion is still in existence. Sedley conjectures that this is because it is Dion who is hopping around saying, 'I have lost my foot'. Theon cannot be saying this, since he never had that foot. Now, we are told, Chrysippus uses the principle he established in advance, that there cannot be two people occupying the same substance, i.e. matter (*ousia*). So the Growing Argument is wrong, since it is Dion who is alive and Theon who cannot be alive too.

Of course, according to the propounders of the Growing Argument, Theon had died already, when the leg grew, so it may sound confusing to say that he is dead (perfect tense, three times, *diephthartai,* not present tense 'perishes') when the leg is amputated. But what is meant, I suggest, is that after the amputation he cannot come back to life, as they supposed, but *remains* dead. This neatly matches Chrysippus' wording according to which Dion *remains* alive (*menein*). Philo's complaint that Theon has been 'snatched away' reflects not Chrysippus' real position, but the perspective of the Growing Argument. Since the Growing Argument expected Theon to return to life, his remaining dead looks to them like a second death.

This account already incorporates my first variation, because I have avoided saddling Chrysippus with the need to press against his opponents by some unstated prior argument the implausible suggestion that they are already committed to Dion and Theon sharing the same matter simultaneously – Dion and Theon are not alive simultaneously, on my account. Of course, if Chrysippus' opponents try to wriggle out of the conclusion that Theon remains dead by denying Chrysippus' ban on sharing matter, then they will make Theon come back to life as a part of Dion. But they will have been forced to bring this implausible outcome on themselves as the final consequence of the argument in the text, not induced by some unstated argument to make Theon a part of Dion from the beginning.

My second suggestion is the one relevant to persistence over time. It concerns the complaint made in the text against Chrysippus: how can Theon remain deprived of life (from the Growing Argument perspective, die a second death), solely because of the survival of someone *else*, Dion? Philo asks this in support of the Platonists who want it to be Theon who comes back to life. His point is that being dead cannot be a merely relational matter.

I conjecture that the question may first have been raised by Chrysippus, who never wanted Theon to go out of existence in the first place. Chrysippus may have been complaining that it is the Academic defenders of the Growing Argument who, by making identity depend on size, make Theon a candidate for coming back to life. But an operation on Dion should never have been thought to make Theon a candidate, since coming to life is not a relational matter, and if Theon is a candidate, he will be a loser. There might, as already remarked, be a parallel criticism against the Stoics' own criterion of identity, the unique quality. The criticism would be that identity could be lost through someone else coming to share the previously unique quality, and the Stoics may have intended to avoid this by making their unique quality unshareable.

The absurdity is parallel to one complained of in modern philosophy. The modern parallel concerns someone whose body is ageing, but whose brain is healthy, and half of it, carrying all the distinctive psychological characteristics, is transplanted into a healthy body. It has been argued that the resulting person cannot be identical with the original. This would be clear if the other half of his brain was also transplanted, with very similar results, into another body, for then the two resulting people, not being identical with each other, could not both be identical with the original. But it is further argued in the style of Chrysippus (Bernard Williams, *Problems of the Self,* Cambridge 1973, ch. 4, cf. 1 and 2, cited by Derek Parfit, *Reasons and Persons,* revised ed. Oxford 1987) that the self-identical survival of the original person after the first transplant cannot depend on whether a further transplant is provided for an entirely *different* person. So self-identical survival must be denied in relation to the first transplant.

(x) Parfit on survival

It has emerged in (viii) and (ix) that some of the ancient disputes are paralleled in modern discussions of individual survival, even though the modern ones are couched in terms not of theological possibilities, but of science or science fiction. But there is still another far-reaching parallel in Parfit's discussion, in that he makes us face the implications of surrendering bodily continuity. Origen's belief that he could be resurrected in a numerically different body is parallel to Derek Parfit's belief that he could enjoy some kind of survival short of identity, if his present body was destroyed, but the information from it was electronically beamed, so as to construct an exactly similar body and brain with exactly similar psychology at a distance, say on the planet Mars (*Reasons and Persons*, 199-320). Parfit, like Origen, discounts the need for bodily continuity, and discounts the idea we encountered in Philoponus that it matters whether the original body is replaced gradually, or all at once (*op. cit.*, Appendix D).

Suppose one had to go to Mars, and the only choice allowed was whether to go by rocket, with all the attendant risks and loss of time, or whether to go by teletransportation. Suppose that the technology of teletransportation had become at least as reliable as that of rockets. Those who nonetheless feel that it would be safer to travel to Mars by rocket than to undergo a teletransportation whose end product, after the sudden replacement of matter, might be a different person ought perhaps to transfer this feeling also to Origen's postulate of a 'new body' resurrection, although it is not clear how far they should be tempted by Origen's prospect of a superior body, or alarmed at its different material constitution.

They may, then, be more comfortable with Parfit's different scenario, closer to the orthodox Christian view of resurrection, in which a person enjoys some kind of survival through his brain with his psychological characteristics being preserved and transplanted into a numerically different body. The feeling that some of the very same matter needs to be preserved intact has affected Christian burial practices. For those who do consider it significant, the main point of requiring the very same matter is not that numerical sameness of matter is valuable *in itself*, but the thought that it would secure personal identity, as opposed to a merely similar person, and that is commonly considered (although Parfit's aim is to challenge this) to be important.

After writing this, I learnt that the last two parallels with Parfit have already been pointed out by Bynum Walker.

(xi) Same only in form

Origen, like Aristotle in *GC* 1.5, intends the same form to supply numerically the same body. But there is a different Aristotelian use of 'same in form (*eidos*)', inspired by Plato *Symposium*, in which sameness in form contrasts with numerical sameness, and implies mere similarity. According to Aristotle, celestial bodies are the only ones to remain forever numerically the same (despite Xenophanes' belief in a new sun every day). Others remain the same only in form.

The tradition starts when Plato puts into the mouth of Socrates' mentor, Diotima, in the *Symposium* the claim that mortal things only *seem* to continue the same by means of *replacement*. First, humans replace their bodily parts, their mental characteristics and their knowledge, which slips away unless practice replaces old memories. Secondly, humans die and replace themselves by offspring. This fits with *Timaeus* 28C1-2, where Plato says that all perceptible things are coming into being and generated (*gignomena kai gennêta*). On the other hand, Plato

does not accept the view, which he develops out of Heraclitus, that everything is changing in all respects all the time, *Theaetetus* 152C-153D; 181B-183C, since he describes it, in order to reduce it to absurdity.

Aristotle *Meteorology* 2.3 applies the doctrine to the four elements, Aristotle *GC* 2.11 and Alexander *in Meteor.* to everything subject to natural generation, i.e. to everything except celestial bodies. They allow that such things may remain numerically the same for a while, but in perpetuity they have only sameness in form. Alexander further applies the doctrine, without the word 'form', to the mixture of wine and water: you can recover the ingredients, but only ones of the same kind, *Mixt.* 231,22-9.

Plotinus echoes the *Symposium* in two passages drawn to my attention by Wilberding. In 4.3 [27] 8 (24-8), Plotinus contrasts intelligibles as having a being which is numerically one with corporeal things whose being belongs to them only in respect of form. And in 2.1 [40], he seeks to explain how the heavens and the celestial bodies there differ from things down here below the moon. Horse and man, he suggests, persist only in form (*tôi eidei monon menein*), since there is always horse and man; but not the same, 2.1 [40] 1 (22-7). By contrast, the celestial has numerical oneness and numerical being, as a particular this (*tode*), 2.1 [40] 1 (4-12), 2.1 [40] 1 (36-9); 2.1 [40] 2 (1-6); 2.1 [40] 2 (14-20), even though it is not made of the imperishable fifth element which Aristotle postulates, 2.1 [40] 2 (12-13). As with Alexander, some sublunary individuals (i.e. below the sphere of the moon) are allowed temporary numerical sameness, since, as Wilberding points out, some such individuals are allowed to be longer-lived than others, 2.1 [40] 1 (28-31); 2.1 [40] 3 (9-10).

Damascius *in Parm.* 2.254-5 Ruelle (Combès-Westerink 4.16,14-15; 17,24-5) considers that the soul may be *between* remaining the same numerically and in form.

Reading

Alexander and Philoponus:

Inna Kupreeva, 'Alexander of Aphrodisias on mixture and growth', *Oxford Studies in Ancient Philosophy*, forthcoming.

Ph. Lyndon Reynolds, *Food and the Body, Some Peculiar Questions in High Medieval Theology*, Leiden 1999, ch. 3.

Christians:

Henry Chadwick, 'Origen, Celsus and the resurrection of the body', *Harvard Theological Review* 41, 1948, 83-102.

H. Crouzel, 'Les critiques addressées par Méthode et ses contemporains à la doctrine origénienne du corps ressuscité', *Gregorianum* 53, 1972, 679-716.

H. Crouzel, 'La doctrine origénienne du corps ressuscité', *Bulletin de littérature ecclésiastique* 81, 1974, 175-200; 241-66.

Jon F. Dechow, *Dogma and Mysticism in Early Christianity, Epiphanius of Cyprus and the Legacy of Origen*, Macon, GA 1988, ch. 12.

Ph. Lyndon Reynolds, *Food and the Body, Some Peculiar Questions in High Medieval Theology*, Leiden 1999, chs 13-14.

A. van Roey, 'Un traité cononite contre Jean Philopon sur la resurrection', in *Hommage à Maurits Geerard*, Wetteren 1984.

Richard Sorabji, 'Philoponus' in his (ed.) *Philoponus and the Rejection of Aristotelian Science*, London 1987, ch. 1, 32-3.

Carolyn Bynum Walker, *Fragmentation and Redemption*, New York 1992, ch. 7

Stoics:

Eric Lewis, in preparation, 'Not again: the Stoics on time, recurrence and our future selves'.

David Sedley, 'The Stoic criterion of identity', *Phronesis* 27, 1982, 255-75.
Richard Sorabji, *Matter, Space and Motion*, London & Ithaca, NY 1988, ch. 10, 'Closed space and closed time'.
Richard Sorabji, 'Soul and self in Ancient Philosophy', in James Crabbe, ed., *From Soul to Self*, Wolfson College Lectures, London 1999, ch. 2, 8-32.
Parfit:
Derek Parfit, *Reasons and Persons*, Oxford 1984, corrected edition 1987.
Plotinus:
James Wilberding, *Plotinus' Cosmology: A Study of Ennead II.1 (40)*, PhD diss., University of Chicago 2003.

Biological growth:

(1) Aristotle *GC* 1.5, 321a18-22

Of the three things that happen one is that every part whatsoever of the growing extension (e.g. of flesh, if flesh is growing) is bigger, secondly by the accession of something, and thirdly what is growing is preserved and persists. RRKS

(2) Aristotle *GC* 1.5, 321b26-8

The accession is not to every part whatsoever. Rather, some leaves and some arrives and the accession is to every part whatsoever of the figure and form (*eidos*). RRKS

(3) Aristotle *GC* 1.5, 322a28-33

This form, like a tube (*aulos*), is a force (*dunamis*) in matter. If some matter comes in which is potentially tube, with its quantity potential too, these [combined] tubes will be larger. But if [the matter] can no longer act, but is like water mixed with wine in ever greater amount which eventually makes the wine watery or water, then it will produce a wasting away. The form, however, persists. RRKS

(4) Alexander *Mixt.* 16, 237,26-238,10

We must understand that the case of bodies that grow through nutriment by the agency of nature and the nutritive faculty is like conceiving of <water or> wine moving along a tube (*sôlên*) which maintains the same shape, but because of its elasticity and pliancy is compressed and maintains its shape in a smaller volume when the water moving along it is less than its volume, but when this is greater, it expands in every direction and assumes a larger volume. As with such a tube the water is not what grows, as it does not remain at all stable [238] but assumes varying volumes, but the shape containing the liquid is what is stable and what assumes expansion and contraction – so too must the process involved in natural growth be understood: that while the matter to which the growing form

belongs must vary at different times on account of its continual deterioration, the form, on the other hand, that remains stable on the flowing matter by anology with the shape of the tube, diminishes when the matter decreases, but grows when the assimilation of matter increases, maintaining all along the body's individual shape. For an identical form belonging to a larger amount of matter is larger than one which belongs to a smaller amount, just like the shape of the tube, which, because of its elasticity, adjusts to what flows through it. RBT

(5) Philoponus *in GC* 106,12-17

Let us use a model to make this account clear to ourselves. If someone noticed a shadow cast by some body on a river flowing past, the shadow, being in the water as in a substratum would be one and the same numerically, but the water would not remain the same, but bit by bit some would flow away and more would replace it. The form must be thought of in just the same way, the matter being replaced bit by bit but itself always remaining one and the same numerically. CJFW

(6) Philoponus *in GC* 106,3-11

The following objection might be raised: perhaps it is not only the matter of things that grow that is not always the same, because it is in a state of flux with some matter departing and other matter being added, but also the form itself. For if the form has being in the matter as substratum, and it is impossible, when the substratum perishes, for that which has its being in that [substratum] to be preserved (for in that case it would be separate, and *not* inseparable from matter), then the form of the growing thing cannot be preserved [and remain] the same either.

As a solution, we say that if all the matter were to go out of existence together at the same time (*athroon*) the point just made would be correct, but, as it is, it seeps away bit by bit (*kata meros*), a new replacement is immediately found for it, and thus form remains one and the same numerically. CJFW

(7) Philoponus *in GC* 107,3-14

But it must not be thought that the whole of the matter as a whole (*holê kath'holên*) replaces itself over time, seeping away bit by bit, so that there is no [bit of] body in us when we have grown old [which was part] of the substrate that was in us at the time of our original framing. For if that were so, it would be possible for animals to be immortal, their matter always being at its peak. As it is, however, the matter is not able to keep its form throughout its whole extent, since it becomes weary with time, the parts that have been fitted together being incapable of preserving throughout the harmony and correct mixture as a result of their being affected by

contrary powers. So it must be supposed that not all the matter is dissipated, but that the more solid parts of it particularly remain always numerically the same. This is why we also see the scars of wounds which may chance to have been received in youth remain in flesh and bones until death. So for this reason also the form must remain numerically the same. CJFW

(8) Alexander(?) *Quaest.* 1.5, 13,13-16

For not all the matter in things that grow changes, but some of it remains and other matter is added. For [otherwise the thing] would not have been preserved in the first place, nor would the form of the matter that existed beforehand have remained. RRKS

(9) Alexander *Mixt.* 235,25-34

Indeed, everything that has its being in matter undergoes various changes in respect of its matter because this [the matter] does not remain one in number, but continuously changes in respect of its parts and assumes various states, while in respect of the form in it everything is stable in number; for in respect of the form, flesh remains the same in number, and if one part of its supporting matter disperses while another accedes, then, as long as some of the matter remains in it, it preserves the form of the flesh, and prevents its total destruction by the stability of the exchange (*diadosis*). For the being of flesh does not lie in the extent of its magnitude, which does not remain the same on account of the fluidity of matter, but in the sort of form it has, which remains the same so long as any flesh is preserved. RBT

(10) 'Simplicius' *in DA* 217,36-218,2 (*SVF* 2.395, LS 28I)

If in the case of compounds there is an individualised form (*atomôthen eidos*) from which, among the Stoics, the distinctively qualified individual (*idiôs poion*) gets its name, a form which supervenes (*epiginesthai*) and departs all at once (*athroôs*), and remains the same throughout the whole life of the compound, although different parts [of the compound] go in and out of existence at different times .... RRKS

(11) Posidonius in Stobaeus vol. 1, 178,10-21 Wachsmuth (part of Posidonius fr. 96, LS 28D 5-8)

[Posidonius says that] the substance neither grows nor shrinks by addition or subtraction, but merely alters (*alloiousthai*), as in the case of numbers and measures. But growth and shrinking happen to distinctively qualified beings like Dion and Theon. And that is actually why the quality of each persists from birth until death, in the case of plants, animals and suchlike

which admit of death. They [the Stoics] say that in the case of distinctively qualified beings there are two parts that can receive admissions, one at the level of substance, the other at the level of quality. It is the latter, as we often said, that admits of growth and shrinking. RRKS

(12) Simplicius *in Cat.* 140,25-31

The answer is that even if the matter were in continuous flux, and one were to grant this, and even if additions and subtractions are occurring in bodies *ad infinitum*, even so there is clearly something which endures, either the second substrate, as some say, or the unique quality, as others say, or the substance according to the form or the individual (*atomos*) and compound substance, or some other such thing which endures throughout the changes and is recognised from start to finish; for discourse is about the evident, not about what is unclear and in dispute. BF

States returning to existence:

(13) Aristotle *Phys.* 5.4, 227b29-32

For a change (*kinêsis*) to be one without qualification depends on all [three] of these factors: the respect in which [the change takes place], viz. its type, must be one and indivisible. The when, viz. the time, must be one and not interrupted. And the thing in motion must be one, not accidentally. RRKS

(14) Aristotle *Phys.* 5.4, 228a3-19

If Socrates undergoes a change of quality which is the same in kind, but now at one time, now at another, then if it is possible for what has gone out of existence to come into existence again numerically one [with what went before], this change too would be one change. Otherwise it would be the same, but not one change.

There is a puzzle similar to this, whether health is one in its being, and in general whether states (*hexeis*) and phases (*pathê*) in bodies are. For the things that have these qualities are evidently in change and flux. If, then, the health of this morning and of now are one and the same, why, when somebody loses and regains his health, would not the later health be numerically one with the former?

The principle is the same, except that there is this much difference [between states and changes]. If [the states] are two, by this very fact the activities [reading: *energeias* and W.D. Ross's text] have to be two as regards their number, since an activity numerically one has to be the activity of something that is numerically one. But if the state is one, perhaps it would not on that account be thought by anyone that the activity too has to be one, since when someone stops walking, the walking no longer exists, but will do so when he walks again. If, then, [the walking] were one

and the same, then one and the same thing would be able to perish and exist many times. RRKS

(15) Aristotle *Phys.* 5.4, 228b1-7

And that is why a change that is without qualification continuous and one must be the same in type, must belong to one subject and must take place in one time: in one time, so that immobility shall not intervene. For when the time is interrupted, the thing has to be at rest, and where rest intervenes, there is not one change but a plurality. Thus if a change is divided by rest, as it is if there is an intervening time, it is not one, nor continuous. RRKS

(16) Aristotle *EN* 7.14, 1154b17-19

By 'coincidentally pleasurable' I mean medical cures. These seem to be pleasurable because being cured coincides with the action (*prattein*) of the part that remains healthy. RRKS

(17) Simplicius *in Phys.* 886,23-6

He [Aristotle] has said that when there is a temporal gap a change (*kinêsis*) would not be numerically one, unless what went out of existence and came into existence were one in species or in number, and he has shown that this is impossible by 'if it is possible for what has gone out of existence to come into existence again numerically one' [228a4-5]. RRKS

(18) Simplicius *in Phys.* 887,7-11

For Socrates, when he returns from abroad, is one and the same as he was before going abroad, and his health and knowledge seem to be the same of the same person, just as beds that are taken to pieces and reassembled are the same, even if they are reassembled after being many times taken to pieces. Or perhaps the beds are the same but their assemblies and disassemblies are not numerically the same. JOU

(19) Themistius *in Phys.* 175,16-18

Suppose Socrates walks after the new moon and again after a week. Then it is simply the time which, not being one nor continuous, prevents it being one single process. RRKS

Alexander against Stoic eternal repetition:

(20) Alexander *ap.* Philoponum in *GC* 314,9-22

But as Alexander says, one might confront Aristotle with the following problem. If matter always remains the same, and the efficient cause is also

always the same, what cause would prevent numerically the same things existing again from the same matter, through the same agencies over some enormous cycle of time? Some people say this happens in the recurrence (*palingenesia*) of the world and the Great Year in which the reinstatement of all the same things occurs. In that case, there would be rebirth and numerically identical return also for particulars whose essence is mortal.

Against this it must be said that, even if it were granted that Socrates is born again, the Socrates who is born later would not be numerically one and the same as the one who was born first. For what is numerically one and the same thing cannot be intermittent (*dialeipein*). For it attains to being numerically one and the same not by being made of the same things, but by persisting (*diamenein*) as the same thing both earlier, and later. That is why the sun is numerically the same, but Socrates, as Aristotle said [338b16?] is not numerically the same, since the individual form (*atomon eidos*) does not remain, even if [sc. on the hypothesis of 314,9-13] the matter does. RRKS

(21) Porphyry *ap.* Proclum *in Tim.* 3.234,23-6

They [the vehicles] are mixtures kneaded (*phuramata*) together out of the heavenly spheres, and the soul collects them together as it descends; so that they both are and are not [the same?], and they are no longer each the very individuals (*auta hekasta*), nor does their distinctive character (*idiotês*) remain (*diamenein*). WC

The next four texts report the Stoics:

(22) Tatian *To the Greeks* ch. 5 (*SVF* 1.109)

We must deprecate Zeno who declares that by means of the conflagration the same men arise again engaged in the same [activities], I mean Anytus and Meletus in accusing, Busiris in killing foreigners and Heracles again in his labours. RRKS

(23) Alexander of Aphrodisias *in An. Pr.* 180,33-6; 181,25-31

[The Stoics] think that everything in the world comes about again the same in number after the conflagration, and so too the distinctively qualified individual (*idiôs poion*) exists and comes into existence in that world the same as the earlier individual, as Chrysippus says in *On the World.* ...

And [the Stoics] say that differences (*parallagai*) arise between the later distinctively qualified individuals and the earlier ones only in respect of certain external accidents, differences which could arise in Dion without changing him while he is alive and remains the same. For he does not become someone else, if he first has freckles on his face and later has them

no more. Such, they say, are the differences that arise as between the distinctively qualified individuals in one world and another. RRKS

(24) Origen *Against Celsus* 4.68; 5.20

But in an attempt somehow to cure the contradictions, the Stoics say that everyone in the cycle will be – I don't know how – indistinguishable (*aparallaktos*) from the people of previous cycles, so that it may be not Socrates who comes into existence again, but someone indistinguishable from Socrates, due to marry someone indistinguishable from Xanthippe, and to be accused by people indistinguishable from Anytus and Meletus. Somehow – I don't know how – the cosmos is always the same, and is not [merely] 'indistinguishable', yet the things in it are not the same, but are 'indistinguishable'.

Those of the Stoics who were embarrassed by the doctrine [of no differences] have said that a small and very restricted difference arises in the cycle as compared with the people in the previous cycle. ... RRKS

(25) Simplicius *in Phys.* 886,12-16

The Stoics say that the same I comes into existence in the recurrence. But unsurprisingly they ask whether the present and former I are numerically one through being the same in essence (*ousia*), or whether I differ because of the different location in time of different cosmogonies. RRKS

The argument from the food chain in Origen:

(26) Origen in Methodius *On the Resurrection* 1.20.4, in *GCS* ed. Bonwetsch, 243 = Epiphanius *Panarion Haer.* 64.12, *GCS* II ed. Holl, Dummer, 422

As food is assembled in our body, and changes what it is like, so our bodies are changed in carnivorous birds and beasts and become parts of their bodies and again they are eaten by men or other animals and are changed in their turn and become the bodies of men or other animals. When this happens over a long time, necessarily the same body will become part of different humans. Of which human, then, will it be the body in the resurrection? RRKS

Augustine and cannibalism:

(27) Augustine *City of God* 22.20, *CCL* 48

Whatever flesh hunger has drained away [from the cannibal] has certainly been dispersed to the winds and from there the Creator, as I have said, is able to recall what has slipped away. And so that flesh will be restored to the person in whom it first began to be human flesh. From the second

person [the victim], the flesh must be thought of as taken by way of loan, which, like borrowed money, has to be repaid to the source from which it was taken. But to the person [the cannibal] whom hunger has emaciated, his own flesh will be restored by the one who can recall even what has evaporated. DGR

(28) Augustine *City of God* 22.12, *CCL* 48

And where then will be [that promise], 'not a hair of the head will perish', if from the very mass of the body so much will perish? And yet, concerning the very hairs, one might ask whether whatever the barber has cut off shall be returned. But if it will be returned, who would not recoil at that unsightliness? And of the fingernails it would seem to follow of necessity that as much as care of the body has cut away, so much would be returned. And then where will be the comeliness, which ought surely to be greater in that immortality then, than it could be in the state of corruption? And yet if it is not returned, it follows that it will perish. So then, how, they ask, will 'not a hair perish?' DGR

The solution ascribed to Origen in terms of same bodily form:

(29) Origen in Methodius *On the Resurrection* 1.22.3, in *GCS* ed. Bonwetsch = Epiphanius *Panarion Haer.* 64.14, *GCS* II ed. Holl, Dummer, 423-4 = Origen *Selecta in Psalmos* XI, 384ff. ed. Lommatzsch

Yet Paul or Peter for instance are always the same, and not only in respect of the soul whose substance in us neither flows nor ever receives any accretions. They are the same even if the nature of the body is subject to flow, thanks to the form (*eidos*) which characterises the body being the same, so that the imprints which provide the bodily quality of Peter and Paul also remain the same. It is because of this quality that scars remain in our bodies from childhood and other uniquely distinctive features (*idiômata*), like freckles and anything further of that sort. [I mean] this bodily form with which Peter and Paul are informed is again draped round the soul in the resurrection, but changed for the better. I do not at all mean this substrate which has been assigned to the soul originally. RRKS

(30) Origen in Methodius *On the Resurrection* 3.3.4-5, in *GCS* ed. Bonwetsch, 391 = Photius *Bibliotheca* 234 (Methodius) 299a-b, Budé vol. 5 ed. P. Henry, 101

Origen, then, wants not that the same flesh should be resurrected for the soul, but that such and such a shape of each, conforming to the form (*eidos*) which now characterises the flesh, should be imprinted in a different pneumatic body and resurrected, so that each person may again appear the same in shape, and this is the promised resurrection. For he says that the material body is subject to flux and never remains the same in itself, but

departs and arrives in connexion with the form (*eidos*) which characterises the shape (*morphê*). It is the form by which the shape (*skhêma*) is governed. Thus the resurrection must be in respect of form only. RRKS

Origen is said to postulate a pneumatic vehicle:

(31) Origen in Methodius *On the Resurrection* 2.30.8, in *GCS* ed. Bonwetsch, 388 = Photius *Bibliotheca* 234 (Methodius) 299a, Budé vol. 5 ed. P. Henry, 100

Any mixture consisting of pure air and pure fire is of the same substance as the angels and cannot have the quality of earth and water since it would then come about that it was earthy. Origen imagined that the human body which is going to be resurrected was of such a kind and of such materials, and he even called it a pneumatic body. RRKS

(32) Origen in Methodius *On the Resurrection* 3.18.1, in *GCS* ed. Bonwetsch, 414-15 = Photius *Bibliotheca* 234 (Methodius) 300b-301a, Budé vol. 5 ed. P. Henry, 105

Having expounded the view that, after its departure from here, the soul has a vehicle (*okhêma*) different from, but of the same form as (*homoeides*) this perceptible one, he represents the soul as incorporeal by a somewhat Platonic rationale. Thus, in the light of his saying that after its departure from the world it needs a vehicle and vestments, as not being able to persist naked, how could it fail to be incorporeal in itself? RRKS

See also Origen *Against Celsus* 7.32, which also speaks of a new body, but 4.57 speaks as if it is only the qualities that change.

Methodius' objections to Origen:

(33) Methodius *On the Resurrection* 3.6.7, in *GCS* ed. Bonwetsch, 397-8 = Photius *Bibliotheca* 234 (Methodius), 300b, Budé vol. 5 ed. P. Henry, 104

But, he [Origen] says, 'yes, for [the soul] will be relocated in a pneumatic body'.

[*Methodius*]: But then it must be admitted that the original (*auto to prôton*) distinctive form (*eidos idiôs*) itself will not be resurrected, because its quality is changed (*sunalloiousthai*) together with the flesh and it perishes with (*sumphthinai*) the flesh. For even if it is remoulded (*meta-plattesthai*) into a pneumatic body, that is not the original unique substrate (*auto idiôs to prôton hupokeimenon*) [of the soul], but a certain likeness of it remoulded into a tenuous body. But if [old Slavonic here has extra material] neither the form nor the body is resurrected the same, but is different from the preceding one, since what is like is different from what is like it, it cannot be that original one in relation to which it was created. RRKS

(34) Report of Origen in Methodius *On the Resurrection* 3.7.1-7, 398.20-399,25, in *GCS* ed. Bonwetsch, 251-2, from German translation of the Old Slavonic *ms.*, with some Greek quotations

But even here [Origen] is eristical. For after declaring that the form is what is resurrected, when glorification accrues to it, [Origen] took back his words 'as the form (*eidos*) of Jesus, Moses and Elijah was no different in the Resurrection from what it had been'; he had forgotten them, and like unreasoning people began to proclaim something else. For not being willing to speak the true words, 'Where there will be wailing and gnashing of teeth [Matthew 8:12; 13:42 and 50; 22:13; 24:51; 25:30; Luke 13:28]', he instead fabricated words opposite to the true words, as follows. 'What need of teeth is there for those who are being punished? For they will not eat when situated in Gehenna and the Creator fashioned every part of the body for some purpose,' and 'it is not possible that we should be resurrected with the same quality, possessed of legs and hands again and suchlike'.

He has said something thoroughly self-contradictory. For how is it not contradictory when he affirms that the persisting form will be resurrected and further declares that the same imprint ('the same likeness') will not come about, while nevertheless no other form will come about than the identical imprint ('the likeness') which shows each and every form that is in each and every individual. For he says, that it is what shows the quality of the bodily parts in the character (*kharaktêr*) of the shape of each person that is form. Thus, if he hopes that the resurrection happens in the (essential) form, one must be resurrected in possession of the form again, which means hands, feet and other members, even if the body comes to be changed into something subtle.

Origen says, 'as it is inappropriate to be resurrected in the same form, with feet and teeth and other members'. For if there is absolutely no need there of hands, nor of feet, nor of other (sc. members), then the form is not resurrected. If, however, the form is resurrected, then everything must be resurrected that was in there first. For even if the body given to the soul will be a spiritual body, even so the spiritual body too must be assimilated to the first body and must be given its shape, if the resurrection is only in respect of form. RRKS

Origen is said to compare bodily form with a wine skin, like Aristotle's tube:

(35) Origen in Methodius *On the Resurrection* 1.25.4-7, in *GCS* ed. Bonwetsch = Epiphanius *Panarion Haer.* 64.17.6-10, in *GCS* II ed. Holl, Dummer, 428-9

You must before now have seen how the skin of an animal (*derma zôiou*), or something like it, filled with water, always displays the same form (*eidos*), if it is gradually filled as it gradually empties. For what is inside must take its shape in relation to the state of what surrounds. Thus when the water flows out underneath, if someone adds as much as pours out, and

does not allow the skin (*askos*) to be emptied of water all at once, <see> if it is not necessary that what is added looks like the original [water], because the surrounding in relation to which the water flows in and out is the same.

Someone who wants to compare the body to this will not be embarrassed. For it is in the same way that what is introduced from the food in place of the flesh that has been extruded below gets changed into the shape (*skhêma*) of the surrounding form (*eidos*). As much as is distributed to the eyes resembles the eyes, as much as to the face resembles the face, as much as to the other parts resembles them. In this way, each person appears the same, and it is not the flesh, the original substrate, that is in the same place [as what comes from the food]. Rather, the form by which what enters is informed [is in the same place].

So if we are not the same in body even over a few days, but rather in our form, which is in the body, for only form has remained clear of replacement, all the more we shall not be the same in respect of the same flesh at that time [of the resurrection], but in respect of the form which even now is always preserved and stable in us. For the skin in the comparison is the form, and the water is what is added and removed. Just as now the body is not the same, but the character (*kharaktêr*) in respect of the same shape (*morphê*) is preserved the same, so at that time the body will not be the same, but the form will have grown into something more glorious, and will be displayed no longer in a perishable, but in an impassible body of *pneuma*. RRKS

Epicureans on the next life:

(36) Lucretius *On the Nature of Things* 3.847-64

If time reassembled our matter after our death and again restored it as it is arranged now, and the light of life was again given to us (*nobis*), even if that was done, it would still not be of any concern to us, when once the memory of what was ours (*repetentia nostri*) was broken off (*interrupta*).

[852] Even now we are not at all concerned for our former selves (*nobis qui ante fuimus*). Already in this case distress does <not> afflict us at all about them. For when you look back at the whole past space of immeasurable time and at how diverse are the movements of matter, you could easily believe that these same seeds of which we are now composed have often before been placed in the same arrangement as now. But we cannot recapture that in our mind's memory, for in between is cast a gap (*vitai pausa*) in life and all the movements have wandered astray everywhere away from our senses.

[861] For if by chance it is going to be wretched and sad, the very person (*ipse*) must exist then at that time, in order that evil can befall him. RRKS

Eudemus' reply to Pythagoreans on eternal repetition:

(37) Eudemus *ap.* Simplicium *in Phys.* 732,26-733,1

One might be puzzled whether or not, as some people say, the same time recurs. For sameness is spoken of in different ways, and it does seem that a time the same in kind recurs, e.g. summer, winter and the other seasons and periods. Similarly, motions (*kinêseis*) the same in kind recur, for the sun will accomplish its solstices, equinoxes and other journeys. But if one were to believe the Pythagoreans' view that numerically the same things come again, and I will talk staff in hand, to you sitting like this, and everything else will be alike, then it is plausible that the time too will be the same. For when the motion (*kinêsis*) is one and the same, and similarly there are many things which are the same, their before and after is one and the same, and hence so is their number. So everything is the same, which means that the time is as well. RRKS

The ship of Theseus:

(38) Plutarch *Life of Theseus* ch. 23

The Athenians preserved up to the time of Demetrius of Phaleron the thirty-oared ship in which [Theseus] sailed with the youths and maidens and got back safe. They removed the old planks and installed strong ones, fixing them in such a way that the ship became an example even to the philosophers for the controversial Growing Argument. Some of them said the ship remained the same, some not the same. RRKS

(39) Simplicius *in Cat.* 214,24-31 (*SVF* 2.391; LS 28M)

The Stoics too according to their own assumptions would raise the same difficulty against the argument which states that all qualified things are spoken of in terms of a quality. They say that qualities are 'havable' (*hekta*), and restrict 'havables' to things that are unified, while in the case of things that exist in combination (*sunaphê*), like a ship, or in separate parts, like an army, they say there is no one thing that is 'havable', and that no single instance of spirit (*pneumatikon*) is found in their case, or anything possessing a single principle (*logos*) of the sort to achieve the existence of a single state (*hexis*). The qualified, however, can be seen in things which exist in combination and separate parts. BF

The Stoic shrinking argument:

(40) Philo *On the Eternity of the World* 48-9 (= *SVF* 2.397)

Chrysippus, the most distinguished among the Stoics, produces a portent of the following sort in his *On the Growing Argument*. First he establishes in advance (*prokataskeuazein*) that two distinctively qualified individuals cannot co-exist in the same substance (*ousia*, i.e. matter). Then he says,

'For the sake of argument, let one of them be conceived as having limbs intact, and the other as being without one foot. Let the intact one be called Dion and the maimed one Theon. Then let one of Dion's feet be cut off.'

When it is asked which of the two is dead (*diephthartai*), he [Chrysippus] says that Theon is the more appropriate one. This is the verdict of a paradox-monger rather than of someone speaking the truth. For how can Theon have been snatched away when he has had no part amputated, while Dion who has had his foot cut off is not dead (*oukhi diephthartai*)?

'It is inevitable,' Chrysippus replies, 'for Dion, who has had his foot cut off, has retreated into the maimed matter (*ousia*) of Theon and two distinctively qualified individuals cannot exist in the same substrate (*hupokeimenon*). Therefore Dion must remain alive (*menein*) and Theon be dead (*diephtharthai*).' RRKS

The same only in form:

(41) Plato *Symposium* 207C9-208B6

Diotima: 'For here too, in the same way as there, mortal nature seeks as far as possible to exist always in immortality. But it can do that only by reproducing, because it always leaves behind a new and different (*heteron*) animal in place of the old one. For [this is] even while it is described (*kaleisthai*) as each being one (*hen*) of the animals alive and being the same (*to auto*), as e.g. one is called the same (*ho autos legetai*) from childhood until one becomes an old man. Yet this [person], though never having the same things in himself, is nonetheless described as being the same (*ho autos kaleitai*), but he is always becoming new, and losing some things in respect of hair, flesh, bones, blood and his entire body. And not only in respect of his body, but also in respect of his soul, the habits, character, opinions, appetites, pleasures, pains, and fears – each of these is never the same for each [person], but some are coming into, and others going out of, existence. And, much more strange still, even with our knowledge, something is coming into, something else going out of, existence, and we are never the same even in respect of knowledge, but every single bit of knowledge suffers this [flux]. What is described as practising (*meletan*) is a matter of knowledge departing, for forgetting is the departure of knowledge, and practice, by instilling a new memory again, in place of the one that is leaving, preserves knowledge, so that it is thought (*dokein*) to be the same (*tên autên*). For this is the way in which everything mortal is preserved, not by being altogether the same always (*pantapasin to auto aei*) like the divine, but by what is leaving and ageing leaving behind in us something new and different (*heteron*) like itself. By this device, Socrates', she said, 'a mortal body and everything else partakes (*metekhein*) of immortality. But the immortal does it differently. So do not be surprised if everything naturally values its offspring, since for everything this effort is for the sake of immortality and loving (*erôs*) goes along with that.' RRKS

(42) Aristotle *Meteorology* 2.3, 357b26-358a3

And indeed we must first raise a preliminary problem, whether the sea always remains composed of parts the same numerically (*arithmôi*), or the same in form and quantity (*eidei, posôi*) with the parts always changing, as with air and drinking water and fire. Each of these is for ever different (*aei allo kai allo*), but the form of their multiplicity (*plêthos*) remains stable, as with the flux of flowing water and of flame. It is clear, then, and convincing that it cannot help being the same story with all these things, and that they differ [only] in how fast or slowly they change. There is going out of, and coming into, existence with all of them, but with all of them it happens in a regulated way. RRKS

(43) Aristotle *GC* 2.11, 338b11-19

The beginning of the inquiry again is this, whether everything comes round again (*anakamptein*) or not everything, but some things do numerically the same, others only in form (*eidos*). Things whose substance, which is in motion, is imperishable [sc. celestial bodies] will clearly be the same even numerically, for the movement is determined by the thing moved. But things whose substance is perishable, not imperishable, must come round again the same in form, not numerically. And that is why water that comes from air and air that comes from water are the same in form, not numerically. Or if even these [sc. the four elements, on Empedocles' view] are numerically the same, this is still not the case with things whose substance comes into being and are such as to admit of non-existence. RRKS

(44) Alexander *in Meteor.* 79,19-24

It does not follow that if the parts of the universe come into and go out of existence again, the whole universe does as well. For not all the parts of the universe are like this, but those around the earth transform into each other and circle round. Through their motion in correspondence with that of the celestial bodies, they have a certain kind of relation to those bodies, so that even they remain imperishable as regards form (*eidos*), but numerically (*kata ton arithmon*) they change into each other and come to be for ever different (*allote alla*). RRKS

(45) Alexander *in Meteor.* 82,17-83,6

But first, says Aristotle, we must raise a preliminary problem, and consider whether, given that the sea always endures, it always endures in reality, in such a way as to keep its parts numerically the same, as is true of every celestial body, or whether it is in form (*eidos*) and in quantity (*poson*) that it is always composed of the same parts, but not numerically (*tôi arithmôi*). In that case, its parts change, and some go out of existence, while others

supervene, like air and drinking water and fire. These too do not stay the same numerically, but are eternal in form, not numerically, as said just above. The quantity (*to poson*) of each of them is also thought to remain the same overall, as Aristotle makes still clearer by what follows, as is the case with flowing water and the flux of flame, which are numerically ever different (*aei to kat' arithmon allo kai allo*). It is plausible in the case of all things of this kind, that is of generated things, that, in the same way, it is in form that they remain the same, not in number, and that the only difference among them concerns how fast or slowly they change. For some do not remain numerically the same even for a short time, like rivers and burning flames. Others do stay for a short time, and do not have their being consist in coming into existence, but do not stay for ever, so as to be exempt from change. For with everything around the earth (by 'all these things [Aristotle *Meteor.* 357b34]' he means not 'all without qualification', but 'all these things whose origin is the vapour from the earth'), but [we can add] with everything that comes into, or goes out of, existence naturally, the coming into, and going out of, existence is regulated. RRKS

(46) Alexander *Mixt.* 231,22-9

Thus when certain things are added to them which can contribute to such an actualisation, they easily recede to their own nature, not because the original (*proteron*) water and wine is separated out again (they were not, that is, preserved in the first place in the mixture, since that would just be juxtaposition and not blending; for where bodies have been blended, the whole product of the blend is one and uniform), but through such a blend being easily able to change into water [or wine], [and] changing into what was not originally mixed from such [constituents] with such a quality. RBT

(47) Plotinus 4.3 [27] 8 (24-8)

For some things individuality (*to kath' hekaston*) [I have standardised the transliteration as two words] flows, because of the nature of bodies, since their form (*eidos*) is adventitious (*epaktos*), and their being always belongs to them in respect of form (*kat' eidos*), in imitation of real beings. But for other things, since they are not composite, their being is numerically one (*arithmôi hen*) and resides in what is (*ho estin*). It belongs from the beginning, and neither does there come into being anything that formerly was not, nor will what is (*ho estin*) fail to be [in the future]. RRKS

(48) Plotinus 2.1 [40] 2 (1-6)

If, then, we accept this opinion, and say that the heaven and all that is in it has everlastingness in respect of the particular this (*kata to tode*), whereas the things beneath the sphere of the moon have it in respect of form (*kat' eidos*), it must be shown how the heaven, while having a body,

can have the particular this (*to tode*) said of what is the same in the proper sense (*epi tou autou kuriôs*), as being individual (*hôs to kath' hekaston*) and the same way (*hôsautôs*), even though the nature of body is always flowing. RRKS

States returning to existence again:

(49) Philoponus *in GC* 65,22-66,9

Someone might wish to add this too to what has so far been said: strictly speaking, it is not *the same* fluidity that is in air and in water, nor precisely the same transparency, because air is both more transparent and more fluid than water. So neither the fluidity of the water nor its transparency remained unaffected in the change from water to air, since the warmth that is in air and [that which is in] fire are not specifically (*kat' eidos*) identical either. And in composite things too there are many things hot in the generic sense, but specifically different; for the heat that is in wine is different from that which is in pepper or castoreum or balsam or similar things. It should be known, therefore, that the same sort of thing happens in the case of the coming-to-be of the elements from each other as happens if blood comes to be from wine, when the whole form (*idea*) of the wine perishes and the heat that is in the blood comes to be as a specifically different heat.

[32] And if someone wanted [to hold the view] that heat in fire and air or fluidity in water and air are not specifically different, but differ only in being of greater or less intensity, they would have nevertheless to agree with this point at least, namely, that these qualities are numerically different. For when mustard or pepper is sown it produces specifically the same heat in the plants which grow from it, which are of the same species (*homoeidês*) as it, but for all that, the quality that is in the seed and that which is in the fruit which comes to be from it are admittedly numerically different. In the same way, in the case of the elements too, the whole form of the air has to be understood as perishing when the water comes to be. So even if someone agrees that specifically the same fluidity and transparency is produced in the water, he will still be compelled to say that it is numerically different. In that case nothing remains of the air except the matter. The change, then, is not from something already possessed of form, to something possessed of form, but from something unformed to something possessed of form, given that only that which is unformed remains. So the change from water to air is not change of quality. CJFW

(50) Philoponus *in DA* 334,21-5

So when the activity is said to be reflected from smooth bodies, nothing is meant other than that such bodies receive the activities of light and of the

objects of sight, and cause the reflection not of activities numerically identical with those it received. Rather, the bodies are themselves of a nature to act in response with similar activities. RRKS

7. Philosophy of Language

7(a) Do words mean thoughts or things?

Aristotle offers a brief but very influential account of word meaning at the beginning of *On Interpretation*. On the standard interpretation, spoken words symbolise inner mental entities primarily, and only secondarily actual things. Like written words, spoken words are not the same for all men, and hence are merely conventional, unlike the animal cries mentioned at 16a28-9. But the mental entities and actual things symbolised are the same for all.

Aristotle does not anticipate the Stoic answer that the propositions and predicates signified (*lekta* or 'sayables') are neither thoughts nor things, or at least, they are not beings (*onta*), although they are not nothings either. They are somethings (*tina*). This significant step on the road to the idea that speech and thought are directed to what are called intentional objects (see **17** below) is missing from the texts that follow. But it is recognised (e.g. in (5)) that any theory must allow for reference to the non-existent things.

(1) Aristotle *On Interpretation* 16a3-8

What are in vocal sounds (*phônê*) are symbols (*sumbola*) of experiences (*pathêmata*) in the soul, and written [marks] symbols of what are in vocal sounds. And as written marks are not the same for all men, so neither are vocal sounds the same. But the things of which these are in the first place (*prôtôn*) signs (*sêmeia*), namely experiences (*pathêmata*) of the soul, are the same for all, and the things of which these [experiences] are likenesses, actual things, are also the same. RRKS

In the Aristotelian school Andronicus dismissed the authenticity of *On Interpretation* (see **2(a)(iv)** above) on the ground that he could not identify the cross-reference to a work on the soul which immediately follows the last sentence quoted. Aspasius and Alexander's teacher, Herminus, reject the idea that experiences in the soul are the same for all. Aspasius objects that people have very different opinions about justice and goodness, so Aristotle must have been thinking just of corporeal things. To this Boethius offers a reply which seems to come from Porphyry. Herminus' complaint is that words are ambiguous, and he concludes that Aristotle never spoke of the *same* experiences and things, but only of *these* experiences and things, which would be expressed by the orthographically indistinguishable word *tauta*. Porphyry, the Neoplatonist, replies that sameness for all is indispensable to Aristotle's claims that some things are natural (and some not). Another teacher of Alexander, Sosigenes, canvassed, without finally deciding, the view that words signify not mental entities, but things.

The Neoplatonists, unlike some modern commentators, took 'in the first place' to mean that things are symbolised (they did not distinguish signs from symbols) only *via* experiences. Among modern commentators, Weidemann endorses this as an interpretation of Aristotle.

The Neoplatonists also relate the symbolised experiences (*pathêmata*) of 16a3-4 to the thoughts (*noêmata*) first mentioned just after the passage quoted at 16a10. If the experiences are mental images, human thoughts do indeed, for Aristotle, have such images as their material basis (see *DA* 3.7, 431b2; 3.8, 432a3-14; *Mem.* 449b30-450a9).

The use of *pathêmata* in this context is already found in Plato's *Republic.* Describing falsehood (*to pseudos*), he says:

(2) Plato *Republic* 2, 382B9-C1

Since the *pathêma* in words is a sort of imitation (*mimêma*) and a subsequently generated image (*eikôn*) of the experience (*pathêma*) in the soul, it is not altogether unmixedly false. RRKS

Dexippus supports the view that what is primarily signified is thoughts against the arguments of Sosigenes, Alexander's teacher, in favour of things.

Philoponus in (11) provides an interesting sidelight on the idea that what is primarily signified is thoughts, when he says that, but for embodiment, we could have signified thoughts directly to each other without having to use names. Cf. *Contra Proclum* 77,15-24.

At *Int.* 16b33-17a2 Aristotle switches from the conventionality of individual words to the conventionality of whole sentences. Richard Gaskin has discussed Simplicius' account of sentence meaning. At *in Cat.* 397,22-5, Simplicius considers the things primarily symbolised by sentences, namely discursive thoughts (*logikai dianoêseis*) about Socrates sitting or not. In the preceding lines he discusses the things secondarily symbolised. These are not individuals like Socrates simply, but rather individuals like Socrates in respect of the activity of sitting or not sitting, 397,15-16. In other words, they are complex entities. Simplicius describes them also in terms of a rational animal active in this way, or a body with certain qualities, 397,7; 11-12. The complexes 'Socrates sitting' and 'Socrates not sitting' are opposed in the same way as the sentences which symbolise them. Compare below under **7(l)** for the role of 'is' in Aristotle not as a copula, but as affirming that such complexes are the case.

(3) Aspasius (and Porphyry?) *ap.* Boethium *in Int.*^{2}, 41,13-23

Aspasius finds himself in great difficulties on this point. How, he wonders, is it possible that the experiences (*passiones*) of the soul are the same for all men when there is such a diverse opinion on the just and the good? For Aspasius thinks that Aristotle meant the experiences of the soul have nothing to do with incorporeal things but only with things which can be perceived by the senses. [413C] But he is wrong, for neither will the person who is mistaken ever be said to have understood, and perhaps whoever thinks of what is good not as it is but otherwise will indeed be said to have had an experience of the mind, but is not said to have understood. AS

(4) Herminus and Porphyry *ap.* Boethium *in Int.*^{2} 39,25-40,28

But Herminus goes against this interpretation. For he says it is not true that thoughts which spoken sounds signify are the same for all men; for what, he says, is expressed in equivocation, when one and the same type

of spoken sound signifies more than one thing? He thinks the following is a more truthful reading [16a6-8]: 'Now what these are in the first place signs of, *these* (*tauta*) are experiences of the soul for all and what these experiences are likenesses of, *these* too are things' so that here is apparently demonstrated [40] what spoken signs signify or what experiences of the soul are likenesses of. According to Herminus all we must take from this is that experiences of the soul are what spoken sounds signify as though he said 'experiences of the soul are what spoken sounds signify' and again 'what have likenesses and are contained in thoughts are things' which is the equivalent of saying 'things are what thoughts signify'.

[40,9] But Porphyry assesses both views subtly and with precision and approves more of Alexander's view which declares that one need not deny that equivocation involves multiple meanings. For the man who speaks fixes his mind on one particular thing, which he thinks and declares in a spoken sound whilst the listener again expects a single thought. But if, when each understands something different from the single name, the one who said the equivocal name designates more clearly what he meant to signify by the name, the listener then receives it and both agree on the one thought, which in turn becomes one for those who at first had had different experiences of the soul because of the equivocation of the name. For since Aristotle distinguished conventional from natural spoken sounds on the grounds that the former are not the same for all men, he would have to maintain that what he thought was natural was natural because it was the same for all men. And so Alexander is to be accepted either on his own account or on the authority of Porphyry. AS

(5) Dexippus *in Cat.* 7,8-8,23

In putting forward the case of *things*, and wishing these to be the subject of statements, he [Sosigenes] employs the following set of arguments:

(1) 'If things are somehow the decisive factor in relation to speaking or not speaking, so that if they do not exist, we say nothing, and if they exist we make a statement, they would be what is said.'

In reply to this I would say nothing prevents *things* from being the causes (*aitia*) of speaking, although they are not immediately (*prosekhôs*) *what is said*, which is what we now are seeking. For example, exposure to the sun is the cause of fever, and a prick of a needle the cause of pain, but neither is the needle *present* in the pain, nor the exposure to the sun *in* the fever. For, of causes, some are external and separate, while others are present in the effect, so that it is possible both for things to be causes of our utterance, but yet not to be what is uttered. For we speak about things that are not present before us, and about past and future things, and, since the statement about them exists, the thing would have to exist also. But if the things are not called into existence with the utterance, they would not be what is said. For it is possible to speak about non-existent entities too, such as centaurs and goat-stags, and madmen and ecstatics speak; so that if in

fact what is said were things, they too would be bringing their statements to bear on things, and we would not be able to name anything that did not exist.

[7,24] (2) 'Again,' he says, 'if the truth or falsehood of a statement derives from things, it could not be the case that what is uttered is one thing, and what makes the truth or falsehood another; so that those things would be the subjects of statements which are causes of the complete statement.' In making use of this argument, I am surprised that Sosigenes did not realise that, if it were the case that every statement is true or false, he would have seemed to make sense in asserting that it is things that are what is said, but if there is a class of statement that is neither true nor false, and it is possible to make a statement which bears on no subject matter, how is it possible for him to maintain this argument? Further, it is one thing to speak about a thing, and another to make a true or false statement about it, but our present enquiry concerns the subject-matter of utterance. In addition, even granting that the thing is the cause of a true or false statement, it does not necessarily follow that things are what is referred to; for it is possible that, if someone were to grant this, a statement might come to be true or false because of these [things], but the objects of reference of the statements might be different. For it is not the case that when a statement is receptive of truth or falsehood, it derives its truth or falsehood from things; for being true or false is an accidental attribute of a statement, whereas its making a primary reference is essential to it.

[8,11] (3) 'But,' he says, 'if, even after being mentioned, things (*pragmata*) such as 'horse', for example, or 'ox' or 'stone' continue to exist, it is obvious that it is these that are what is signified; for otherwise they would no longer exist when the utterance was completed.' But I would say just the opposite, that just in view of this things are not what is uttered, nor does utterance have relation primarily to them. For the utterance which talks about them is transitory, while the things themselves remain. But if it were things that were what is signified, it would necessarily follow that they too should no longer exist when the utterance has passed away. As it is, however, one may have the case where someone is speaking and, as it might be, also listening [to another], and the things about which he is speaking do not exist. And yet if it is necessary that the agent should exist at the time when the patient is receiving the action, it is necessary that what is uttered should exist at that time when the hearer is hearing. But if the speaker and the hearer exist, but the things do not, when the statement concerns past events, how is it possible for things to be what is signified? JD

(6) Dexippus *in Cat.* 9,22-10,32

This, then, completes this dialectical exercise. The ancients, however, declare that the only things signified are objects of thought (*noêmata*). Since these are about things (*pragmata*) and arise from things, it is thoughts which are signified primarily, but on a secondary level things

also; for truth and falsehood do not reside in things, but in reasoning (*dianoia*) and the processes of the mind (*nous*). At any rate Aristotle in Book 3 of his treatise *On the Soul*, speaks as follows (3.6, 430a26ff.): 'The thinking of indivisible objects is neither true nor false, but where falsehood and truth are found, there is already a combination of thoughts (*noêmata*).

It is, then, thoughts (*noêmata*) which are primarily signified (*sêmainomena*) and uttered. For thoughts (*noêseis*) occur to us about past and non-existent things and we communicate them by speaking. True and false speech would not come about, if speech did not receive truth and falsity from thoughts (*noêmata*). For the primary kind of speech (*logos*) is that in our reasoning (*dianoia*), from which speaking itself and uttered speech probably get their name.

[10,6] Again, ambiguities (*amphiboliai*), homonymies and all deception arising in words (*lexis*) occur through there being several thoughts (*noêmata*) since our reasoning lights on one of them or another. So if there is one name, but several thoughts (*noêseis*) connected with it, then what is said is also multiple. RRKS

[10,10] It is possible to prove the same point from the opposite case also. For if I say both *methu* and *oinos* for wine, there is only one thought (*epinoia*) corresponding to both of them, and yet the words are different and not the same. And further, meaningless words demonstrate with absolute directness that it is thoughts that are the objects of reference; for we say that such and such a person is 'saying nothing', since it is impossible for either the speaker or the hearer to generate any thought (*noein*) on the basis of such utterances. Those who babble, then, are said to be 'saying nothing' by virtue of the fact that they are thinking (*noein*) of nothing. And in general no one would say that the other animals employ speech, plainly because they do not share in reasoning (*dianoia*). So it is plain to us from all these considerations that it is thoughts that are signified primarily, and secondarily things.

[10,19] A predication, then, is an utterance which supplies, for example, the thought (*noêma*) of 'Socrates', not differing, however, from the mental image of Socrates other than in that the thought (*noêma*) 'Socrates' is an indivisible and simple motion of the soul-activity and is not an affective (*en pathei*) object of contemplation, whereas imagination manifests itself as an affection (*en pathei*) of thought, being a kind of working-out and accomplishment of it. I am not saying that discursive thought (*dianoêsis*) *is* imagination (for there are thoughts (*noêseis*) of incorporeal entities, but there are not mental images of them), but rather that imagination underlies thought (*noêsis*). So then, predications are not the entities themselves, but utterances (*lexeis*) signifying thoughts (*noêmata*) and things. For when they say, ' "Animal" is predicated of "man",' they are saying that the utterance (*lexis*) signifying *animal*, which is the word 'animal', is predicated of the thought (*noêma*) signified by the term 'man', and of the thing which is its subject; for to be predicated is a property of significant utterances (*phônai*), which signify thoughts (*noêmata*) and things. JD

(7) Ammonius *in Int.* 22,12-21, translated under **7(b)** below

(8) Ammonius *in Int.* 23,10-15

But in what follows, what can it mean that neither the elements (*stoikheia*) nor the letters (*grammata*) are said to be symbols of what is in the vocal sound, but rather 'what is written'? As has been said, we note that names and verbs are said in three ways – those which are thought, those which are pronounced, and those which are written – and Aristotle posits that those which are pronounced are symbols of those which are thought, and those which are written of those which are pronounced. DB

(9) Porphyry *ap.* Boethium *in Int.*[2] 29,29-30,10, translated under **7(b)** below

(10) Porphyry *Abstinence* 3.3.2, translated under **7(b)** below

(11) Philoponus *in Cat.* 14,2-5

Our souls, stripped of bodies, could have signified things to each other by means of thoughts (*noêmata*). But since they have been bound in bodies which conceal their intellective part like clouds, they needed names (*onomata*) for signifying things to each other. RRKS

(12) Simplicius *in Cat.* 396,31-397,25

Having shown that possession is distinct from *having* a possession, and that privation is distinct from *having* a privation, and that nevertheless what has a possession and [what] has a privation fall under the same opposition – that, namely, of possession and privation – <[Aristotle] says the same about affirmation and negation>, and proves the point with an example. For the object (*pragma*) denoted by the affirmation is not [itself] an affirmation, and that [denoted] by the negation is not [itself] a negation, since the affirmation and negation are sentences (*logoi*), while the [objects] signified by them are not sentences.

[397,4] But even though the [signified objects] are not the same [as the corresponding sentences], they too nevertheless fall under the same opposition – that, namely, of affirmation and negation – exactly as the things which *have* possession and those which *have* privation [fall] under the [opposition] of possession and privation. For when I think of Socrates sitting, I suppose him in accordance with the object itself (*auto to pragma*) to be a rational animal engaging in this activity. But the sentence which says that Socrates sits, assembled [as it is] from a noun and a verb, is different from the object itself. Whether, indeed, statements (*protaseis*) consist in words or in the [corresponding] thoughts or in the incorporeal sayables [the *lekta* of the Stoics] which subsist parasitically (*paruphistamenois*), these [statements] differ from bodies with qualities. And the

former things are said to be opposed as statements, as negation and affirmation, whereas the latter things under the statements are also themselves opposed in the same way.

[397,14] But, they say, no one would say that Socrates is opposed to himself. Well, in point of fact we do not say that the opposition comes about [as an opposition] to another *thing*, but in respect of the *activity* of sitting or not sitting. And the opposition comes about for these [i.e. the sitting/the not sitting] in virtue of the opposition [consisting] of the contradictory pair, because these [objects] signified [by the statements] are mutually cancelling, and that is just how the contradictory pair also is opposed. And, contrariwise, because the sentences are thus and so, the [signified] objects are also mutually cancelling, and the proportion comes about in the same way [in each case]: just as the [one] denoted object relates to the [other] denoted [object], so the [one] denotative sentence relates to the [other] denotative [sentence], and contrariwise. And even if we should take as opposites the things signified by the words – and these are the rational discursive thoughts (*dianoêseis*) about Socrates seated or not – they too are said to be opposed in the same way as the affirmation and negation: for they too are *under* the negation and affirmation. RG

Reading

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Norman Kretzmann, 'Aristotle on spoken sound significant by convention', in J. Corcoran, ed., *Ancient Logic and its Modern Interpretations*, Dordrecht 1974, 3-21.

John Magee, *Boethius on Signification and Mind*, Leiden 1989.

G. Nuchelmans, *Theories of the Proposition*, Amsterdam 1973, ch. 8.

H. Weidemann, *Aristoteles Peri Hermeneias*, Berlin 1994, 134-51.

7(b) The thoughts as an inner language

Some of the passages about words meaning thoughts construe the thoughts as an inner language. This idea stems from Plato *Theaetetus* 189E and *Sophist* 263E3-8, which define thought (*dianoeisthai*) as the soul's talking with itself.

(1) Plato *Theaetetus* 189E

Socrates: Do you call thinking what I do?
Theaetetus: What?
Socrates: The talk which the soul goes through with itself about whatever it considers. RRKS

Aristotle repeats the idea at *An. Post.* 1.10, 76b4-7, and the Stoics built it up into a distinction (later borrowed by Christians to describe the persons of the Trinity)

between uttered (*prophorikos*) and internal (*endiathetos*) *logos*, *SVF* 2.223. This distinction is still being used by Porphyry in the passages from *Abstinence* book 3, quoted below under **7(n)**, in which he argues against the Stoics that animals have both internal and uttered *logos*.

Plotinus repeats the point about *logos*, and his pupil Porphyry is more explicit. Thought is what is voiced silently in the soul before speaking.

(2) Plotinus 5.1 [10] 3 (7-8)

Just as uttered (*en prophorai*) *logos* is an image (*eikôn*) of *logos* in the soul. RRKS

(3) Plotinus 1.2 [19] 3 (27-8)

Just as voiced (*en phônê*) *logos* is an imitation of *logos* in the soul. RRKS

(4) Porphyry *Abstinence* 3.3.2

And why should not what an [animal] experiences (*paskhein*) have been thought (*dianoeisthai*) first before it says what it is going to say? By thought I mean what is voiced (*phôneisthai*) silently in the soul. RRKS

Still more explicit is another passage of Porphyry and also one of Ammonius, referring to Aristotle *Int.* 16a3-8 (translated under **7(a)** above), which both regard thought as containing tacit names and verbs.

(5) Porphyry *ap.* Boethium *in Int.*[2] 29,29-30,10

Porphyry asks why Aristotle said '*what are in vocal sounds*' [16a3] rather than 'vocal sounds (*voces*)', and '*written* [marks]' [16a4] instead of 'letters'. His solution is as follows. It is said that for the Peripatetics there are three [kinds of] speech, one written in letters, a second expressed vocally, the third composed in the mind. If there are three forms of speech, the parts of speech are without doubt also threefold. Then since the verb and name are primarily parts of speech, there will be some verbs and names that are written, some spoken, some exercised in the quiet of the mind. AS

(6) Ammonius *in Int.* 22,12-21

For he [Aristotle *Int.* 16a1] said at the beginning that 'It is necessary to set out what are name and verb', since they and the sentence composed of them are seen in three ways: in the soul according to the simple thoughts (*noêmata*) and the so-called 'internal' speech (*endiathetos logos*), in the actual voicing (*ekphôneisthai*), or in the writing (as we also say that of written items one is a name, another a verb, another a sentence). Thus, since both names and verbs, which he said one must set out, are seen, as we said, in three ways, in being thought, said, or written, for this reason

he said [16a3-4] in this way that 'what are in the vocal sounds are symbols' of the thoughts in the soul, which he says are its 'experiences' for the reason given at the beginning, and that 'written marks' are in turn 'symbols of what are in the vocal sounds [16a4]'. DB

The idea of inner language relates to the view that the gods know each other's thoughts intellectually (*noêtikôs*), not perceptually, Proclus *in Crat.* 77, 37,3-5, whereas humans lack any such shared thought (*koinê noêsis*), Simplicius *in Cat.* 15,8-10, so need to communicate through names.

Reading

C. Chiesa, 'Le problème du langage intérieur chez les Stoïciens', *Revue internationale de philosophie* 45, 178, 1991, 301-21.

7(c) Are names natural or conventional?

The Presocratic philosopher Democritus, according to Proclus' commentary on Plato's *Cratylus*, produced four arguments for the conventionality of names.

In Plato's *Cratylus*, Socrates, mediating between the conventionalism of Hermogenes (384D), and the naturalism of Cratylus, is made to canvass the idea that there is an ideal name, the same for all, which is true of a thing by *nature*, and known to the natural-name-giver 389C-390A. It can be embodied in different letters and syllables and the different resulting names will be more or less true, according as they give a better or worse image (*eikôn*), 431D; 439A.

Aristotle has no such truck with naturalness. In *On Interpretation*, he insists that a name is an utterance which signifies by convention (*kata sunthêkên*). No names exist by nature (*phusei*), but depend on becoming a symbol (*sumbolon*), 16a19; a26-8.

The Epicureans and Stoics backed the naturalness of names, but in a very different way from Plato's Socrates. Epicurus and, writing in Latin, his follower Lucretius did so by reference to the idea of some names originating in natural sounds and gestures and in this they were followed by Augustine, see **7(o)** below. Lucretius however rejected the idea of a natural-name-giver offered by Plato's Socrates, 5.1041-1055.

The Stoics, as Origen reports, were naturalists in a different way, thinking of some names as imitations of things. Galen ridicules the idea of the Stoic Chrysippus that the Greek work for 'I' (*egô*) and accompanying gestures are natural ways of pointing to the self, *PHP* 2.2.10-11; 3.5.25-6, de Lacy, *Corpus Medicorum Graecorum* 5.4.1 = *SVF* 2.884 and 895.

The commentary of Porphyry on *On Interpretation* is lost, but he raised an issue in his *Letter to Anebo* about the priestly use of names for the gods. Why does it matter what names are used? It is the thought (*ennoia*) which counts, remaining invariant whatever the name. Iamblichus replies that this would only be true if the names of the gods applied by convention (*kata sunthêkên*), but they depend on the nature of the gods (*Letter to Anebo* ed. Sodano, 2,10, 22,1-10 (taken from Eusebius *Preparation for the Gospel*, *GCS* ed. Mras, 243,19-244,4 and Iamblichus *Myst.* 7.5).

Although Proclus' commentary on *On Interpretation* is lost, very extensive excerpts survive from his commentary on Plato's *Cratylus*, which discusses some of the same subject matter. Ammonius claims in his commentary *in Int.* 1,8 to be following Proclus and Anne Sheppard has shown how strongly Ammonius' commentary on *On Interpretation* is influenced in general by Proclus' ideas.

Nonetheless, Proclus has a very different view of names, believing that they are natural in the strong sense to be discussed in **7(d)** that they are originally given by God. Consequently, Proclus repeatedly attacks Aristotle for saying that names are conventional symbols.

At 47, 15,27-16,4 Proclus objects that Aristotle is inconsistent in claiming that names are conventional symbols. At 49, 16,28-18,4 he attacks an argument ascribed to Aristotle, more fully explained by Ammonius *in Int.* 62,21-63,18, that although our faculty of utterance is natural, language is not an instrument (*organon*) of that faculty, so does not, like our organs of speech, have to be natural. Alexander had already interpreted Aristotle *Int.* 16b33-17a2 as arguing indeed that a sentence is not an instrument precisely because it is not natural. At 58, 25,17-26,3 Proclus takes Aristotle's point at *Int.* 16a3-8 (translated above), that names are not the same for all, to be intended as a proof that they are not natural. Ammonius *in Int.* 19,1-9, Boethius *in Int.*^{2} 37,25 and Porphyry *ap.* Boethium *in Int.*^{2} 40,25 agree. Proclus answers that 'natural' and 'conventional' are ambiguous terms. The ambiguities of 'natural' are spelled out by Proclus at 17, 7,18-8,14. It is agreed that the *mss.* are wrong to make Proclus ascribe to the naturalist Cratylus the second sense of 'natural'. The question is whether Cratylus is credited with the third sense, according to which names are like natural shadows or reflections (so Sheppard), or the fourth sense according to which names are like artistic images (*tekhnêtai eikones*), as van den Berg argues, pointing out that Cratylus describes the first name-givers as using artistic skill (*entekhnôs*, 8,3).

Ammonius takes a completely different view from Proclus, and follows instead the tradition of Porphyry on the 'imposition' of names (**7(j)** below). Names do not originate with God, but represent agreements among humans, agreements with gods being impossible, *in Cat.* 11,8-17; *in Int.* 38,26-8. So Aristotle is right, but does not after all disagree with Socrates in Plato's *Cratylus*. For Socrates thinks names are natural not in the way that shadows and reflections are natural images (as Cratylus believed), but rather, like Aristotle, thinks that names are natural only in the way that artistic images (*tekhnêtai eikones*) are natural when they fit the natures of things, *in Int.* 34,17-35,2; 35,6-12; 36,22-37,18.

Because Proclus' *in Crat.* survives in the form of excerpts, the excerptor sometimes refers to Proclus in the third person.

Democritus:

(1) Democritus *ap.* Proclum *in Crat.* Pasquali 16, lines 23-47 (Democritus fr. 26 Diels-Kranz)

Democritus who said that names are due to imposition (*thesei*) formulated this idea in four arguments. First, from homonymy: different things are called by the same name; therefore, the name is not natural. Second, from polyonymy: for if different names apply to one and the same thing, they apply to one another as well, which is impossible. Third, from the changing of names: if names are natural, why did we change the name of Aristocles to Plato and that of Tyrtamus to Theophrastus? Fourth, from the deficiency of similar [derivative] terms: why from 'thought' do we say 'to think', but from 'justice' we do not also derive a verb? Therefore, names are chance, not natural. Democritus himself calls the first type 'polysemantic' (*polusêmon*), the second 'equipoised' (*isorropon*), the third 'metonymous' (*metônumon*), and the fourth 'nameless' (*nônumon*). To confute these argu-

ments some respond in reply to the first case that there is nothing strange if one name signifies more than one thing, as 'desire' (*erôs*) indicates different things [when derived] from both 'strength' (*rhômê*) and 'winged' (*pteros*); in reply to the second, that nothing prevents different names from indicating the same thing in one aspect or another, like *merops* and *anthrôpos* [which both signify man], the former in that he has a divided form of life (*memerismenê*), the latter in that he looks up at what he has seen (*anathrein ha opôpen*); in reply to the third, they respond that this very argument is a proof that names are natural because we exchange those laid down without authority and outside of nature for others in accordance with nature; in reply to the fourth, that there is nothing remarkable if names laid down of old fell out of use after a long time. BD

Aristotle:

(2) Aristotle *On Interpretation* 2, 16a19-21; a26-9

A name is a vocal sound (*phônê*) which is significant by convention (*kata sunthêkên*) without [signifying] time, and having no part of itself significant in separation...

I say 'by convention', because no name is a name by nature, but [only] when it has become a symbol (*sumbolon*). For at any rate even the inarticulate noises of beasts for example indicate (*dêloun*) something, but none of them is a name. RRKS

Epicureans:

(3) Epicurus *Letter to Herodotus* in Diogenes Laertius *Lives* 10.75-6

Hence even names did not arise from the beginning by imposition (*thesei*), but the very natures of humans in their various tribes underwent distinctive experiences (*paskhein pathê*), and received distinctive mental images (*phantasmata*) and emitted their breath distinctively, moulded by the various experiences and images, depending in each case on what difference there was in the regions of the tribes. Later, throughout each tribe as a whole, distinctive names came to be imposed (*tethênai*), to make communications less ambiguous to each other and more concise. And for introducing certain invisible things, those who were conscious of them handed on sounds which either they were compelled to utter or they chose by reasoning, and it was in this way, so far as the main causes were concerned, that they communicated. RRKS

(4) Lucretius *On the Nature of Things* book 5, lines 1028-32; 1056-61

But nature constrained people to emit the various sounds of the tongue, and utility shaped the names of things in a manner not far different from that in which the very speechlessness of the tongue is seen to draw boys to gesture, and make them point out with the finger what is present...

Lastly, what is there so surprising in this, if the human race whose voice and tongue are strong, should mark things with different utterances for different experiences (*sensus*). For dumb cattle, and indeed the races of wild animals, are accustomed to raise various dissimilar cries, when there is fear or distress, and when joys swell up. RRKS

Stoics:

(5) Origen *Against Celsus* 1.24 (*SVF* 2.146)

The deep and unanswerable question of the nature of names falls within our subject, whether, as Aristotle thinks, names are due to imposition (*thesei*), or, as the Stoics think, to nature (*phusei*), on the grounds that the first utterances imitate the things of which the names are said. In line with that, [the Stoics] also introduce elements of etymology. RRKS

Porphyry and Iamblichus:

(6) Porphyry *Letter to Anebo* with Iamblichus' reply, *Myst.* 7.5, 257,1-8 Des Places

'But', you [Porphyry] say, 'the hearer looks to what is meant (*sêmainomena*), so that the thought (*ennoia*) remaining the same is self-sufficient, whatever the name may be'. But things are not the way you anticipated. For if names were laid down by convention (*kata sunthêkên*), taking one name in place of another would make no difference. But if names depend on the nature of things, then the names that better resemble that nature are, for sure, also more pleasing to the gods. RRKS

Proclus:

(7) Proclus *in Crat.* 58, 25,17-26,3

To the syllogism of Aristotle which goes as follows: 'things that are natural are the same for all men, but names are not the same for all men, so things that are natural are not names and names are not natural', Proclus objects to the major premise as follows: 'if the name is a form observed in different matter, because it is a form, it is the same for all men; but the first, and therefore the second'. He objects to the minor thus: 'the eye is natural, as is voice and colour and sizes, but these are not the same for all men because intensity and weakness vary in degree. Therefore, not everything that is natural is the same for all men'. Yet, even if one should agree with the above premises, the conclusion is not more Aristotelian than Platonic. For Plato too would say that the name is not natural, as emerges from the discussion which Socrates has later with Cratylus (435A); for that which is natural, just as that too which is conventional, turns out to be of two kinds. BD

(8) Proclus *in Crat.* 17, 7,18-8,14

The term 'natural' can be understood in four ways: (1) as both the whole essences of the animals and plants and their parts; (2) as their activities and powers, like the lightness of fire and its heat; (3) as the shadows and reflections in mirrors; or (4) as artistic images (*tekhnêtai eikones*), which are similar to their archetypes. Epicurus, in accordance with the second [Anne Sheppard's suggestion] sense, thought that names are natural like the principal functions of nature, i.e. the faculty of speech and sight, and as is the activity of seeing and hearing so too is that of naming. Thus, the name is natural as a function of nature. Adopting the third/fourth[?] sense, Cratylus says that the name of each thing is proper, because it was appropriately imposed (*tithenai*) by those who first (*prôtôs*) imposed names skilfully (*entekhnôs*) and knowledgeably. For Epicurus used to say that these men imposed names not knowledgeably but when they were naturally moved like those who cough, sneeze, moo, bark and sigh. Socrates says, in accordance with the fourth sense, that names are natural as products of knowledgeable thought and not of natural appetite, but as products of the imagining soul, they are properly imposed to objects from the beginning [only] insofar as it is possible. In terms of form all names are the same, have one power and are natural; but in terms of matter they differ from each other and are conventional. For in form they are like their objects, but in matter they differ from each other. BD

Ammonius with Alexander:

(9) Ammonius *in Int.* 34,17-35,2; 35,6-12

Here it is worth asking how, when Socrates in the *Cratylus* argues against Hermogenes' assertion that names are by imposition (*thesei*) and shows that they are by nature, Aristotle can insist in these words that no name is by nature. It must be said that 'by nature' is said in two ways by those who count names as by nature, and similarly 'by imposition' is said in two ways by those positing that they are by imposition. Some of those who think they are by nature say 'by nature' opining that they are products (*dêmiourgêmata*) of nature, as Cratylus the Heraclitean thought when he said that a fitting (*oikeion*) name had been assigned by [the agency of] nature to each thing, just as we see that a different perceptual sense is also assigned to different perceptibles. For he said that names resemble the natural, but not the artistic images (*tekhnêtai eikones*) of visible things, for example, they resemble shadows and what usually appears in water or mirrors; that those who say this kind of name are truly 'naming', while those who do not say this are not 'naming' at all, but merely 'making noise', and that this is the job of the knowledgeable man, to hunt down the fitting name provided by nature for each thing, just as it is the job of the sharp-sighted man accurately to know the appearance proper to each thing. Others say they are 'by nature' since they fit the nature of the things named by them. ...

And they too say that names resemble images (*eikones*) – not natural ones, but those made by the art of painting, which makes different likenesses of different models and still strives to copy as well as possible the form of each [model], according to which we often analyse [starting] from the names in an attempt to hunt down the natures of the things named by them, and once we have recognised these natures we try to show that the names applied to the things are consonant with the natures. DB

(10) Ammonius *in Int.* 35,13-19

Of those who classify names as by imposition (*thesei*), some mean 'by imposition' in this way, that it is possible for any man to name any thing with whatever name he likes, as Hermogenes thought, while others do not mean it thus, but rather mean that names are given by the 'namegiver' alone, and that he is the one who has knowledge of the nature of things and states a name appropriate to the nature of each existing thing, or else he is the servant of the one who knows. DB

(11) Ammonius *in Int.* 36,22-37,18

Now, it is clear that the second sense of 'by nature' coincides with the second sense of 'by imposition', for what is imposed by the name-giver as being appropriate to the things for which they stand would be called on the one hand 'by nature', but on the other, as imposed by someone, 'by imposition'. Therefore, Socrates in the *Cratylus*, mediates between Cratylus and Hermogenes, who are diametrically opposed on the question of whether names are 'by nature' or 'by imposition'. He shows that they are not 'by imposition' in the way that Hermogenes thought (for 'by nature' applies to them in the second sense of 'by nature', especially to those [names] by which we indicate the universal and in general the eternal (reading: *aïdia*) things, since these have a nature which is determinate and intelligible to us; [whereas] to ensure the success of the first imposition of names upon individual things whose nature it is to be constantly changing, one must call chance [*tukhê*] a co-worker of tradition). Nor [he shows] are they 'by nature' in the way Heraclitus said. For they are also 'by imposition', most of those imposed on individual things being also what Hermogenes in his coarse way called 'by imposition', and those which signify the eternal nature, these too are 'by imposition' in the second sense of 'by imposition'.

Nor does Aristotle prescribe any differently from this when he says here that no name is 'by nature'. For he denies of them the sense of 'by nature' which the Heracliteans were advocating, just as Plato did, and he would not have declined to call them 'by nature' in the same sense as the divine Plato does. DB

(12) Ammonius *in Int.* 38,26-8

[People try to rule out 'imposition' (*thesis*) of names], even though it stands to reason that the agreement (*sunthêkê*) of humans comes about with humans, and an agreement of humans with gods could not even reach the level of being thinkable. RRKS

(13) Ammonius *in Cat.* 11,11-14

And after humans came together, they agreed with each other to call this, for example, 'wood', this 'stone', and that the vocal sound 'Socrates' should signify this substance, and 'walking' this activity. In this way, then, all vocal sounds came to name what they signify. RRKS

(14) Alexander commenting on *Int.* 16b33-17a2, *ap.* Boethium *in Int.*[2] 93,22-94,14

Alexander steps in to show that speech (*oratio*) is not a tool (*instrumentum*) as follows: every instrument (*supellex*) of natural acts is itself also natural, e.g. because vision is given by nature, the instrument of vision – the eyes – is also natural. In the same way since hearing is natural we know that our ears, which are the tools of hearing, have been given to us naturally. Therefore since a sentence is by convention (*ad placitum*), not by nature (for it is clear that the parts of a sentence, verbs and names, are established by convention as the difference of vocabulary with all nations proves and so by this every sentence is shown to be by convention) and what is by convention is not by nature, speech is not an instrument. For the condition and capacity to signify are natural. But if speech is not natural it is not an instrument. With these and other like arguments he shows that speech is not an instrument. AS

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Robbert van den Berg, 'Smoothing over the differences: Proclus and Ammonius on Plato's *Cratylus* and Aristotle's *De Interpretatione*', in Peter Adamson, Han Baltussen, Martin Stone, eds, *Philosophy, Science and Exegesis: Greek, Arabic and Latin Commentaries*, *BICS* suppl. vol., London 2004.

7(d) Names given by God

Some of the authors just discussed go further: names, not only the names of gods but other names too, are natural because they are given by God. The view is also present in the Christian Origen, who, presumably borrowing from earlier Platonism, says against Aristotle and Celsus that languages do not derive from humans, as we can infer from the power of spells on humans and of oaths or invocations of God by name. It is essential to invoke God as the God of Abraham and the God of Isaac and the God of Jacob. See also his *Against Celsus* 1.6; and *Homilies on Joshua* 20.1 preserved in Greek in *Philocalia* 12.

Despite Porphyry's doubts (*ap.* Iamblichum *Myst.* 7.4, 254,15-16; 256,4-5), in the *Chaldean Oracles*, and Iamblichus, the theory of gods' names does not treat names merely as descriptions because the names lose their natural power in ritual if translated into a language other than the original one. At least, then, the natural force is not merely descriptive, but depends on the sound and pronunciation, which copy the gods' natures. Proclus, however, seems to allow translation into another language, *in Crat.* 57 and 71, 32,5-12 Pasquali, not translated. Origen's position is that a Greek substitution ought for efficacy to preserve some Hebrew names, as in 'the God of Abraham, the God of Isaac and the God of Jacob.'

Origen:

(1) Origen *Against Celsus* 5.45

Now therefore we say that the nature of names is not, as Aristotle thinks, the convention (*nomoi*) of those who lay them down. For the languages (*dialektoi*) found among humans do not derive their origin from humans, as is clear to those who are able to study the nature of the spells which are adapted (*oikeiousthai*) by the fathers of languages in conformity with the different languages and the different sounds of their names. We treated this a little when we said above that, when names are translated (*metalambanesthai*) from whatever language into another, what they were capable of in that language no longer achieves anything, such as it achieved in the original (*oikeioi*) utterances. And even, in the case of [spells on] humans, this is found to be the case. ...

But if this is true when said of human names, what must we think in the case of names referred for whatever reason to the divine? For something is conveyed (*metalambanesthai*) from, say, the name 'Abraham' into the Greek language, and something is signified by the appellation 'Isaac', and something is indicated by the vocal sound 'Jacob'. And if in invoking or swearing, someone names the God of Abraham and the God of Isaac and the God of Jacob, he would produce some effect through the nature of these names or from their very power, with demons being overcome and made submissive to the one who said this. But if he says, 'the God of the chosen Father of the echo' and 'the God of laughter' and 'the God of the one who kicks with his heel', in this way the naming produces nothing. RRKS

The *Chaldaean Oracles* presents religious names as God-given, and therefore, as Origen was to agree, inefficacious if replaced in another language.

(2) *Chaldaean Oracles* from Psellus *Exegesis of the Chaldaean Oracles*, *PG* 122, 1132C (= p. 58 Kroll, fr. 150 Des Places)

'Never change foreign names', for names are given by God (*theoparadota*) to each people and have an ineffable power for ritual. RRKS

The *Chaldaean Oracles* is endorsed by Iamblichus, who answers his teacher Porphyry's question (Porphyry *Letter to Anebo*) why priests use meaningless and foreign names. According to Iamblichus, the names of the gods are character-marks (*kharaktêres*) and images (*eikones*) of the gods, and so can give us knowledge of their essence and lead us upwards until we attach ourselves (*sunaptein*) to them.

(3) Iamblichus *Myst.* 7.4, 255,5-256,9

[The method is] united (*sunênômenos*) to the gods. So one must remove all [human] conception (*epinoiai*) and rational explication from the names of the gods and remove the natural similarities in the voice to things in nature that are naturally conjoined to them. One must suppose in names the intellective and divine symbolical character-mark (*kharaktêr*) of divine likeness. And even if it is unknown to us, it is this that is most holy in the name. It is too great to be divided up for our cognition. But in those cases where we have received the science of analysing [names], we have in the name knowledge of the entire divine essence and power and rank. And we keep in our soul all together the mystical and ineffable image (*eikôn*) of the gods and we lead our soul back up to the gods through the names, and when it is led back up, as far as possible, we attach (*sunaptein*) it to the gods.

But [Porphyry also asks] why do we revere foreign signs above those of our own respective languages? There is a mystical reason for this too. Because the gods revealed that the whole language of the sacred races, such as the Assyrian and the Egyptian, is suited to ritual, we therefore think that we should apply formulas also in the language which has kinship (*sungenês*) with the gods. RRKS

Proclus, in his commentary on Plato's *Cratylus*, and in *PT* 1.29, 124,3-12 Saffrey-Westerink, maintains that there are three orders of names. Some names are given by God, some by particular souls and some by humans who have learnt them from daemons and angels (in *PT* he adds some by daemons), and he quotes the *Chaldaean Oracles*, to show that Theurgy makes God's role in naming ever clearer. He adds that the gods call each other by these divine names, although the One is too lofty to have any name, and that puts a restriction on Theurgy, which cannot reach up to the One.

Daniélou finds some of the same views in the fragments of the fourth century Christian heretic Eunomius preserved for attack by Gregory of Nyssa, *Contra Eunomium* book 2. Since Iamblichus did not go as far as this, and since Eunomius, who comes before Proclus, did not influence Proclus, Daniélou suggests that Eunomius may have picked up the views, otherwise lost, of Nestorius in the fourth century, father of the Neoplatonist Plutarch of Athens. He further comments that

against Eunomius' insistence on divine causality, Gregory repeatedly insists on human freedom to invent both names and other things.

(4) Proclus *in Crat.* 51, 19,30-20,18 Pasquali

It thus seems to me that it is reasonable of Plato to grant the lawgiver the creation of names as well since the universal Demiurge, he says, is also the primal name-giver. It therefore is he, according to *Timaeus* [36C], that named the soul's revolutions 'the revolution of the Same' and 'the revolution of the Different'. If, then, the lawgiver is analogous to the Demiurge, is it not necessary that he also be master of conferring names? On that account, Plato in this passage [*Cratylus* 389A] called the lawgiver a demiurge, even the 'rarest of demiurges'. So also in the *Phaedrus* [255C] Socrates says that 'desire' (*himeros*) is a name imposed (*tithenai*) by Zeus 'out of his love (*erôs*) for Ganymede'. Therefore, some names are products of the gods, and have come all the way down to soul. Others are the product of particular souls which are able to fashion them through intellect and knowledge and others are instituted through the intermediary genera. For certain men who have become involved with daemons and angels were taught by them names that are better fitted to their objects than those which men generally impose. We must recognise their differences which have been given from their creative causes, and refer all names to the one Demiurge, the intellective God. BD

(5) Proclus *in Crat.* 52, 20,22-21,5 Pasquali

The assimilative (*aphomoiôtikê*) activity of the demiurgic Intellect is of two kinds [*Cratylus* 389A]: there is the one in accordance with which the Intellect, looking to the intelligible model, institutes the whole cosmos; and the other in accordance with which it assigns (*epiphêmizein*) names fitting (*prepon*) to each object. *Timaeus* gave a brief exposition of these matters [*Timaeus* 36C], but the therugists and the utterances from the gods themselves teach us more distinctly:

But the holy name even with unresting whirl leapt into the stellar sphere (*kosmoi*) because of the rushing command of the Father [*Chald. Or.* 87 Des Places, p. 43 Kroll]

and another oracle says,

The paternal Intellect sowed symbols in the cosmos, by which it contemplates the intelligible things and is made one with ineffable Beauty. [*Chald. Or.* 108 Des Places, p. 50 Kroll]

The lawgiver too, as he looks to the whole cosmos, both transmits the best polity and imposes the names that resemble real beings. BD

(6) Proclus *in Crat.* 71, 33,18-34,12 Pasquali

For all of these names exist occultly with the gods, but in the second and

third processions they are revealed also to the men who are of the same descent as the gods. There exist some names, then, that are established permanently at the level of the gods – and these are the names by which the inferior gods call those prior to them, as Orpheus says in the case of Phanes [fr. 85], or by which the greater gods name their subordinates, as Plato says that Zeus imposed names on the invisible revolutions of the souls [*Tim.* 36C]. For Fathers define the activities of their offspring for them, and those who have proceeded get to know their own causes by the intellective signs through which they were conveyed. Such, then, are the primal names which have appeared from the gods and through the median genera have reached our rational essence which is suited to speech (*logikos*).

[34,2] But let us now consider other names of the second and third orders which individual souls, whether acting under inspiration (*enthousiazesthai*) from the gods or now operating by [human] knowledge, introduced, once they either associated their own intellectual thought (*noêsis*) with the divine light and were perfected from that source, or entrusted the creation of names to the rational power of speech. For it is thus that artisans, such as geometers, doctors and orators, impose names on the various aspects of their art, the aspects whose properties they thoroughly know. And so too the poets possessed by Phoebus attributed many names to gods and acting in some cases on inspiration (*enthousiasmos*), in others on sense perception and opinion, they distinguished human works from these. BD

(7) Proclus *in Crat.* 71, 32,18-33,4 Pasquali

Not the whole race of the gods can be named. None other than Parmenides reminded us that He who is beyond the beings as a whole is ineffable. Of Him, there are no names, he says, nor any account. Of the intelligible gods, the very first kinds, which are united with the One itself and are called hidden, have a high degree of unknowability and ineffability. For the completely ineffable does not border on that which is entirely apparent and effable. No, it was necessary that the procession of the intelligibles be terminated at the latter order. So it is there that is situated the first thing that is effable and can be called by proper names. For there also, in accordance with the first forms, the intellective nature of the intelligibles shone forth. Everything that precedes this is silent and hidden and only knowable by intuition (*noêsis*). And that is the reason why all art of telestic rites (*telestikê*) ascends all the way up to this order, operating in a theurgic way. Indeed Orpheus as well says that this order is the first to be called by name by the other gods, as the light that goes out from it reveals it to the intellective gods, making it knowable to them and nameable. JO

Proclus, speaking of the names of gods in his commentary on Plato's *Cratylus*, develops the connexion of Theurgy with names in several ways. Theurgy imitates by names the secret marks which the gods have implanted in us. It is intellect that

makes these names like the gods, but as an aid it uses linguistic imagination (*phantasia lektikê*), and the names are like the sculpted images (*agalmata*) of the gods (cf. *PT* 1.29,124,23 Saffrey-Westerink), which are fitted to receive their illumination, and it is therefore sinful to misuse them. The creative role of imagination is restricted by the need to get the images (verbal or sculptural) right and by the warning reflected in Augustine *Gen. Lit.* 12.9.20 that what is here called linguistic imagination can read divine messages, but not interpret them (See G. Watson, *Phantasia in Classical Thought*, Galway University 1988, 140-50).

(8) Proclus *in Crat.* 71, 31,24-32,5 Pasquali

Such are the so-called symbols of the gods. They are uniform in the superior orders but multiform in the inferior. Imitating these symbols Theurgy too produces them through vocal, though inarticulate, expressions (*ekphonêseis adiarthrôtai*).

The third type of property, which has come from the intellective level of being to all things and proceeds all the way to us, is the divine names, through which the gods are invoked and by which they are hymned (*anhumneisthai*). They have been revealed from the gods themselves, cause reversion back to them and to the extent that they are manifest, lead to human understanding. For through these names we are able both to indicate something to each other concerning the gods and to converse with ourselves. BD

(9) Proclus *in Crat.* 51, 19,8-24 Pasquali

But wishing to institute likenesses (*homoitêtes*) of real beings, similitudes which are in a certain way immaterial and products of only the essence of reason, and using linguistic imagination (*phantasia lektikê*), as an aid, it [the power in the soul] brought forth from itself the essence of names. And as the art of 'telestic' ritual (*telestikê*) through certain symbols and ineffable signs makes the sculptures here like (*apeikazein*) the gods and makes these sculptures suitable for the reception of divine illumination, so too by the same power of assimilation (*aphomoiôtikê*) the art of legislation institutes names as sculpted images (*agalmata*) of their objects when it copies (*apeikonizesthai*), through echoes of this sort or that, the nature of real beings; and having instituted them it handed them on to men for use.

For this reason the lawgiver is said to be an authority on the generation of names and just as it is not reverent to transgress against the sculpted images of the gods, so it is not lawful to sin regarding names. For the legislative demiurge of names is intellect which instils copies (*eikones*) of their patterns (*paradeigmata*) in them. And we must revere them because of their kinship (*sungeneia*) to gods. BD

Ammonius gives the subject three lines, unlike the pages and pages in his teacher Proclus, despite claiming at *in Int.* 1,8 to be following Proclus. Indeed, Proclus' fragmentary commentary *in Crat.* in other respects greatly influenced Ammonius'

commentary *in Int.*, as Anne Sheppard has shown ('Proclus' philosophical method of exegesis: the use of Aristotle and the Stoics in the Commentary on the *Cratylus*', in Jean Pépin, H.-D. Saffrey, eds, *Proclus, lecteur et interprète des anciens*, CNRS, Paris 1987, 137-51). But in his commentary *in Int.*, Ammonius confines himself to prayers and curses against people, where the efficacy of *human* names was at stake, rather than the efficacy of *divine* names. Ammonius thus dissociates both himself and his Neoplatonist colleagues from the argument for the naturalness of names which depends on their efficacy in ritual. For Iamblichus and Proclus argued from the efficacy of divine, not human names. The appeal to human names is attributed by Ammonius to the philosophically irrelevant priest Dousareios from Petra. Iamblichus had downgraded spells, or at least love-spells, as a merely human artifice exploiting the natural sympathy in the universe, *Myst.* 4.11-13. It is, however, remarkable that Ammonius can ignore the argument from the efficacy of divine names given by Iamblichus *Myst.* 7.4, 255,5-256,3, Proclus *in Crat.* 51-2; 57; 71 and later Damascius *in Phileb.* 24 Westerink. Origen, the Christian, regards the argument from divine names as clearer than the argument from human names, *Against Celsus* 5.45. And Iamblichus refuses to treat prayer in general as depending, like curses, merely on natural sympathy, *ap.* Proclum *in Tim.* 1.209,1-212,6. Prayer and theurgic approach to the gods depend in Iamblichus and Proclus on the efficacy of divine names.

Why does Ammonius omit the extensive argument from divine names, and allude only to the supplementary argument of Dousareios? Van den Berg has pointed out that Ammonius' silence represents a wider disagreement with Proclus on the role of gods in naming. Ammonius does not give the gods any role. At *in Cat.* 11,8-17 and *in Int.* 38,26-8, both translated at least partly in **7(c)** above, he speaks in the tradition of Porphyry on the 'imposition' of names and makes names a matter of agreement among *humans*. At *in Int.* 34,22-38,22, he makes names natural only in a weaker sense than Proclus, namely that like the images of artists (*tekhnêtai eikones*) they fit the nature of what is named. This denial of a role to the gods in naming may have helped to facilitate Ammonius' agreement with the Christian authorities in Alexandria, about which Damascius was so bitter (*Philosophical History* fr. 118B Athanassiadi = *Life of Isidore* 251,12-14), which was, I believe, an agreement not to flaunt pagan ritual. I no longer think that Ammonius' silence was a *result* of the agreement, rather than part of the background to it. Here are the three lines of Ammonius.

(10) Ammonius *in Int.* 38,23-6

Others attempt to rule out the application of 'by [conventional] imposition' to names, as Dousareios [so Bernays] of Petra does, citing our prayers and curses, in which our names, when they are said, clearly either help or harm the people named [by them]. DB

After Ammonius, Damascius who is disgusted, as remarked, with Ammonius' agreement, refers to Socrates' reverence for divine names, although he is commenting not on Plato's *Cratylus*, but on a much shorter passage in Plato's *Philebus* 12C, a passage whose relevance to ritual had already been noted by Origen *Against Celsus* 1.25 and Proclus *in Crat.* 57. Damascius repeats the comparison cited above from Proclus, of names with sculpted images of the gods, but only as one of three possible interpretations, so that he slightly distances himself from Proclus.

(11) Damascius *in Phileb.* sec. 24 Westerink

Why this great reverence of Socrates for the names of the gods? Because the right names have been consecrated to the right gods (*oikeia oikeiois*) of old and it is out of place to change the unchangeable. Or because according to the discussion in the *Cratylus* the names are by nature attached appropriately (*phusei oikeiousthai*) to the gods. Or because the names are vocal sculpted images (*agalamata phônêenta*) of the gods as Democritus [Chnous, third-century AD Platonist] says. RRKS

Reading

J. Daniélou, 'Eunome l'arien et l'exégèse néoplatonicienne du *Cratyle*', *Revue des Études Grecques* 69, 1956, 412-32.

John Dillon, 'The magical power of names in Origen and later Platonism', in R. Hanson, H. Crougee, eds, *Origeniana Tertia*, Rome 1985, 203-16.

J. Pépin, 'Linguistique et théologie dans la tradition platonicienne', in E.M. Baretin, F. Desbordes, eds, *Signification et référence dans l'antiquité et au moyen âge, Langages* 65, 1982, 91-116.

Richard Sorabji, 'Divine names and sordid deals in Ammonius' Alexandria', in Andrew Smith, ed., *Neoplatonism and Society in Late Antiquity*, Cardiff 2004.

Robbert van den Berg, 'Smoothing over the differences: Proclus and Ammonius on Plato's *Cratylus* and Aristotle's *De Interpretatione*', in Peter Adamson, Han Baltussen, Martin Stone, eds, *Philosophy, Science and Exegesis: Greek, Arabic and Latin Commentaries*, *BICS* suppl. vol., London 2004.

7(e) Names as descriptions

The discussion of names in Plato's *Cratylus*, as has been pointed out to me by Jonas Greene, presupposes the idea which is a subject of modern controversy, that names are descriptions. The name 'Hermogenes', for example, implies things about the attributes of Hermogenes. We do not yet, however, have the idea developed by the Stoics and later elaborated by Origen and Basil of Caesarea that the description associated with a name is a description uniquely true of the individual named. According to the Stoics, a proper name indicates a distinctive quality (*dêloun idian poiotêta*), Diogenes Laertius 7.58.

The Christian Origen took up this account of proper names, saying they presented one distinctive quality for each of body, soul and intellect. After him, the Christian Basil of Caesarea has a variant: on hearing the names 'Peter' or 'Paul', we think of a concurrence (*sundromê*) of unique properties (*idiômata*), *Against Eunomius* 2.4.1-26. The concurrence is not like that cited above under **6** from Dexippus, Porphyry, Proclus and Philoponus. With them, the bundle of properties that distinguishes an individual is *collectively* unique to the individual. But Basil cites properties *each* of which is unique to St Peter, like being the rock on which the Church is built. Basil thereby reminds us of John Locke, who, in his discussion of nominal essences, recognises that different speakers may associate different interchangeable descriptions with a (common) name, *Essay Concerning Human Understanding* 3.2.3; 3.3.18; 3.6.2; 3.6.6; 3.6.31; 3.9.13; 4.6.8. Unfortunately, Basil's unique properties themselves invoke further proper names, such as 'the Church'.

Damascius considers it a defect that we name a complete reality, e.g. the cosmos, by reference to only one distinctive characteristic (*idiotês*), viz. being cosmetically ordered (*kekosmêmenos*), because we are unable to work with the complete circum-

stances (*holai periôkhai*), *On First Principles* 2.198,10-199,20 Westerink-Combès (see Cosmin Andron in *Reading* below).

(1) Diogenes Laertius 7.58

The appellative (*prosêgoria*), according to Diogenes [of Babylon – Stoic] is a part of speech signifying a common quality, e.g. 'man', 'horse', while the proper name is a part of speech indicating a distinctive quality (*dêloun idian poiotêta*), e.g. 'Diogenes', 'Socrates'. RRKS

(2) Origen *On Prayer* ch. 24, sec. 2, *GCS* vol. 2 Koetschau

<A proper name>, then is a concise appellative that presents the distinctive quality (*idia poiotês*) of what is named, for example, there is a distinctive quality of the Apostle Paul, one for his soul by which it is the way it is, one for his intellect by which it can contemplate the kinds of thing it does, one for his body by which it is the way it is. The unique feature which is unconformable (*asuntrokhastos*) with anyone else, since there is no one else in existence indistinguishable (*aparallaktos*) from Paul, is displayed through the naming of Paul. But with humans, names can validly be changed in their spelling, as if the unique qualities were being changed. For example, when the quality of Abram changed he was called Abraham, when Simon's changed he was named Peter, and when Saul's changed, the enemy of Jesus, he was addressed as Paul. But in the case of God, who is unchangeable and always free from alteration of quality, what is as it were a name precisely for him is always one: 'He who is'. RRKS

(3) Basil of Caesarea *Against Eunomius* 2.4.1-26 Durand-Doutreleau

And yet who with their wits about them could subscribe to this account, that necessarily for things of which the names are different, the substances of these things are different? Of course the names of Peter and Paul and of absolutely all [other] men are different, but the substance of all [men] is the same. For this reason in most respects we are the same as one another, but each of us differs from the others solely by virtue of the distinctive characteristics (*idiômata*) which are observed concerning each individual. Hence the names [of particular men] are not actually signifiers of substances, but of the distinctive properties (*idiotêtes*) which characterise the individual. So then when we hear 'Peter', we do not from the name think of his substance (by 'substance' I mean now the material substrate, which the name in no way signifies), but we are imprinted with the notion of the distinctive characteristics (*idiômata*) which are observed concerning him. For immediately from this utterance we think of the [son] of Jonah, the man from Bethsaida, the brother of Andrew, the man called forth from the fishermen into the service of the Apostolate, the man pre-eminent through faith who received upon himself the edifice of the church; none of which

[i.e. these characteristics] is substance, which is conceived as *hypostasis*. So the name marks out for us the character of Peter, but in no way stands for the substance itself. And again when we hear 'Paul', we think of a concurrence (*sundromê*) of different distinctive characteristics: the man of Tarsus, the Hebrew, the Pharisee according to law, the disciple of Gamaliel, the zealous persecutor of the churches of God, the man induced from the fearful vision into deeper insight, the apostle of the Gentiles. For all these characteristics are circumscribed from the single utterance of 'Paul'. DGR

Reading

Cosmin Andron, *Knowledge and Reality in Damascius*, PhD diss., University of London, in preparation.
Jonathan Barnes, *Porphyry, Introduction*, Oxford 2003, 314-16.
Jacques Brunschwig, 'Remarks on the Stoic theory of the proper noun', translated in his *Papers in Hellenistic Philosophy*, Cambridge 1994, 39-56.
Paul Kalligas, 'Basil of Caesarea on the semantics of proper names', in Katerina Ierodiakonou, ed., *Byzantine Philosophy and its Ancient Sources*, Oxford 2002.
David Robertson, 'Proper names', in *Grammar, Logic and Philosophy of Language in Basil of Caesarea: the Stoic Legacy in Fourth Century Patristics*, PhD diss., University of London, 2000.

7(f) Writing

Plotinus, in a passage considered also in **Psychology 16(a)**, thinks that Egyptian hieroglyphs (or perhaps other symbols on temple walls) are unlike our written words, in that they do not imitate spoken words, but directly manifest intelligible reality in the way that an image or statue (*agalma*) can do. Plotinus evidently agrees with Aristotle that this is not the case with ordinary written words. As Aristotle said, in the passage translated above (*Int.* 16a3-4), written words are symbols of spoken sounds. But Plotinus' idea that Egyptians provide an exception proved deleterious to the decipherment of Egyptian hieroglyphs, when Athanasius Kircher took it up in the seventeenth century. Some linguists have maintained that writing in all natural languages expresses to some extent the sounds of the language. The belief that written scripts may directly express ideas, bypassing any linguistic sounds, has also bedevilled the decipherment of the Mesoamerican Maya inscriptions. Plotinus' views on Egyptian symbols were subsequently reinforced by the treatise on hieroglyphs of Horapollo, head of the Alexandrian school of Philosophy and Rhetoric.

(1) Plotinus 5.8 [31] 6 (1-9)

The wise men of Egypt too, I think, grasped by punctilious or inborn understanding that, when they wanted to reveal something through their wisdom, they should not use the imprint of letters, which expound statements (*logoi*) and premisses (*protaseis*), nor use those which imitate the voiced utterances of propositions (*axiômata*), but should draw icons (*agalmata*) and imprint in their temples one icon each for each thing, to express the non-expositoriness (*ou diexodos*) of that [world]. The implication is that

each icon is a kind of understanding and wisdom and a holistic subject, and is not a discursive process of reasoning or planning. RRKS

Reading

Michael D. Coe, *Breaking the Maya Code*, New York 1992, 16-18.
Maurus Hirschle, *Sprachphilosophie und Namenmagie im Neuplatonismus*, Meisenheim am Glan 1979, 68.
Maurice Pope, *The Story of Decipherment*, London 1975, 19; 28-33; revised edition, 1999, adds a section on the Mayas, 195-203.

7(g) The primary bearers of truth and falsity

The primary bearers of truth and falsity are composite thoughts, not composite sentences nor composite things

It was seen under **7(a)** that on the standard interpretation Aristotle makes uttered sounds to be signs in the first place (*prôtôn*, *Int.* 16a6) of experiences of the soul, and these are closely connected with the thoughts (*noêma*, 16a10) mentioned shortly afterwards. If thoughts are the primary things signified, this could have made it seem obvious that thoughts, at least in combination, are also the primary bearers of truth and falsity, not composite sentences, nor composite things. So, for example, Dexippus, Ammonius and Boethius.

An additional consideration appears in Dexippus and Ammonius: ambiguous meaning depends on thoughts. The mere words (*lexis*) do not always give us a single proposition (*protasis*) which is true rather than false, or vice versa, because the words may be ambiguous. It is what is meant (*sêmainomenon*) which in these cases gives us a single proposition with a definite truth value.

(1) Dexippus *in Cat.* 10,1-10

It is, then, thoughts (*noêmata*) which are primarily signified (*sêmainomena*) and uttered. For thoughts (*noêseis*) occur to us about past and non-existent things and we communicate them by speaking. True and false speech would not come about, if speech did not receive truth and falsity from thoughts (*noêmata*). For the primary kind of speech (*logos*) is that in our reasoning (*dianoia*), from which speaking itself and uttered speech probably get their name.

Again, ambiguities (*amphiboliai*), homonymies and all deception arising in words (*lexis*) occur through there being several thoughts (*noêmata*) since our reasoning lights on one of them or another. So if there is one name, but several thoughts (*noêseis*) connected with it, then what is said is also multiple. RRKS

(2) Boethius *in Int.*^{2} 49,23-32 Meiser

It is then clear that if there is a simple thought in the experiences of the soul, since the thought itself so far does not possess the nature of truth and falsity, its expression too will be divorced from both. But when there occurs

a combination made in the thoughts using 'to be' or even a separation made in thoughts – and truth and falsity are primarily created in thoughts – then since spoken sounds take their meaning from thoughts, the spoken sounds too must be true or false to correspond with the thoughts. AS

(3) Ammonius *in Int.* 18,2-12

It will be set out that names and verbs are simple vocal sounds signifying neither truth nor falsity, as was also said in the preface to the *Categories*. But it is with respect to the assertoric sentence fashioned by the interweaving of name and verb that both the true and the false are observed, and, since the [thoughts] are prior to the vocal sounds these [i.e. truth and falsity] are observed with respect to the thoughts, which are causes of the vocal sounds. In fact, some of these [thoughts] are simple, signified by simple vocal sounds and admitting neither truth nor falsity, while the compound ones are concerned with compound things [or: states of affairs (*pragmata*)], signified by compounded vocal sounds and admitting falsity and truth. Yet one would not suppose these [i.e. truth and falsity] to be [inherent] in the things taken by themselves nor even among the compound things. DB

(4) Ammonius *in Int.* 84,30-85,3

For, one saying 'Ajax did not fight Hector' does not contradict one who said 'Ajax fought Hector'. In fact, it is possible for both to be equally true and false, although the propositions seem to consist of the same terms; their identity is only in expression (*lexis*), not in their meaning (*sêmainomenon*), when we take them as being true or false together. If, however, having defined which of the [two] Ajaxes the sentence was about, we predicate of him the fighting or anything else both affirmatively and negatively, at the same time as we observe the other distinctions which we shall add next, it would be necessary that one of the propositions be true and the other false. DB

Reading

Sten Ebbesen, *Commentators and Commentaries on Aristotle's Sophistici Elenchi*, vol. 1, Leiden 1981, 182-3.

Gabriel Nuchelmans, *Theories of the Proposition: ancient and medieval conceptions of the bearers of truth and falsity*, Amsterdam 1973, ch. 8 on Boethius.

7(h) Ambiguity, homonymy

(i) Are homonyms ambiguous names, or things named ambiguously?

We have encountered a similar question, whether Aristotle's *Categories* is about words, things, or concepts. Porphyry's compromise formula, *in Cat.* 58,3-6, was

quoted under **3(b)** above: it is about *words*, insofar as they signify *things*. And Iamblichus, we saw, added that this signification is through *concepts*.

Aristotle makes it explicit that homonyms are *things*, that is *kinds* of thing, with the same name, but different *definitions* (*logos tês ousias*), while synonyms are things with the same definition as well as the same name.

(1) Aristotle *Cat.* 1a1-2

Things are called homonymous which have only a name in common, while the definition of their being (*logos tês ousias*) which corresponds to the name is different. RRKS

Simplicius records, *in Cat.* 24,6-9, a question which he ascribes to others: since Aristotle's *Categories* is about *expressions* (*lexeis*), why does he speak about homonymous *things* (*pragmata*) rather than about homonymy, which Simplicius takes to be linguistic? Simplicius rather records and approves (24,9-13), and a little later derives from Plato (24,23-4) the answer that it is from *things*, e.g. from dogs and sea-dogs, that homonymy becomes clear to us. But he immediately gives a role to both words and concepts. For when the same name 'dog' is spoken, you and I may project (*proballesthai*) different concepts (*ennoiai*). So far, there is nothing at variance with Aristotle, since the appeal to concepts corresponds to Aristotle's appeal to definitions. (I am not myself persuaded that Aristotle here assimilates things to concepts, but for the opposite case see Luna's valuable study, 55-8; 63.) Simplicius continues to give a role to all three, things, words and concepts, saying that properly speaking (*kuriôs*), it is things, not words, that create homonymy (24,20-1), but also that the nature of homonymous things resides not in them, but in the differing concepts (25,5-7). Aristotle could agree with all this. The jarring note comes at 25,4-5; 25,20-6, where Simplicius describes a word (*onoma*) and an expression (*lexis*) as homonymous, e.g. 'dog' or 'he was involved in enslavement'. For more on projection see **Psychology 1(b)**, **2(f)** and **3(c)**.

(2) Simplicius *in Cat.* 24,6-25,9

Some people raise the following problem: why, although Aristotle had proposed to speak about expressions (*lexeis*), and not about realities themselves, does he nevertheless say nothing about homonymy but rather teaches us about homonyms, although the concept (*ennoia*) of homonymy comes first, since it is from this concept that homonyms derive? They rightly say that it is from things (*pragmata*) that homonyms become clear to us: viz., when the same name is spoken, I project (*proballesthai*) one concept (*ennoia*) in conjunction with the name, while you project a different one. For example, if someone says the name 'dog', I might conceive of the land-animal, while you might conceive of a sea-dog. This is why the dialecticians recommend that we keep silent when faced with syllogisms based on homonymy, until the questioner transfers the name to one of the significata. For example, suppose someone asks whether tunics are masculine; we shall agree, if in fact they happen to be masculine. If he then asks whether that which is masculine is animate, we shall also agree, for it is true. But if he should then conclude that tunics are animate, at this

point we must define the homonymy of the term 'masculine', and show that 'masculine' is said of tunics in one sense, but in another of a person possessing masculinity. Thus, properly speaking (*kuriôs*), it is things and not names that create homonymy.

Moreover, Aristotle himself presents his teaching upon homonyms because the discussion (*logos*) of homonymy is also, at any rate, immediately consequent upon the goal (*skopos*) of the *Categories*. For his part, Plato states that it becomes clear from things whether the same name is borne by different things homonymously or synonymously, for he says in the *Sophist* [218C1-3] 'for now, you and I have the name in common with regard to this matter, but perhaps we each privately (*idiai*) keep the fact (*ergon*) which we are naming to ourselves'. Thus it is when it becomes known that each individual has his own particular conception (*ennoia*) of a common name that it becomes clear that the name is homonymous. For homonyms and synonyms are not such in and of themselves; rather, the nature of homonyms and synonyms is in the conceptions (*ennoia*) – be they perverted or in agreement – of people as they converse and name things.

Aristotle was, moreover, right to say 'they are called', since the discussion (*logos*) is not about things themselves, but about significant expressions. MCh

On the standard view it was, not Aristotle, at least not in his *Categories* (see below on his *Rhetoric*), but Plato's immediate successor, Speusippus, who applied the concept of homonymy to names.

Simplicius quotes the Aristotelian Boethus of Sidon as reporting Speusippus calling *names* (*onomata*) homonymous, *in Cat.* 38,19-39,2. As regards Speusippus' definition Simplicius reports:

(3) Simplicius *in Cat.* 29,5

Speusippus, so they say, was satisfied with saying the definition (*logos*) is different. RRKS

But outside the *Categories*, Speusippus and Aristotle may not have diverged after all. Porphyry *ap.* Simplicium *in Cat.* 36,25-31, says it is unjust of Boethus to say Aristotle omitted what recent people (i.e. Stoics) call synonyms, but Speusippus called polyonyms, since Aristotle discussed them elsewhere. Aristotle does indeed, like Speusippus, in the third book of the *Rhetoric*, 1404b37-1405a2, which Porphyry has just mentioned, treat homonymies and synonymies as characteristics of names, contrary to his definition at *Cat.* 1a1.

(ii) Do homonyms have definitions, or can they include individuals?

Porphyry and later commentators weaken Aristotle's definition of homonyms as having different definitions of their being, by treating as homonyms two different individual people who have the same name 'Ajax'. Since individuals, according to

Aristotle, do not have definitions, Porphyry weakens the notion of *logos*, so that it includes not only a definition, but also a description (*hupographê*).

(4) Porphyry *in Cat.* 64,10-21

For example, the son of Oeleus and the son of Telamon are each called 'Ajax'. When we wish to indicate which is the son of Oeleus, we call him Ajax and say, 'This is Ajax the son of Oeleus of Locris'. When we want to indicate which is the son of Telamon, we say, 'This is Ajax the son of Telamon of Salamis'. Clearly the name 'Ajax' is used in common of them – for each is called Ajax – but in giving a description (*hupographê*), which is similar to a definition, of them, clearly one will give a different definitional or descriptive account for Ajax the Locrian than one does for Ajax the Salaminian. Nevertheless, if one called them both men, one would not give different definitions according to the name 'man': insofar as one calls them both 'man', one would give them both the corresponding definition. For you would give as the definition of both, insofar as they are men and are called by that name, 'mortal rational animal'. SS

(iii) What is it for homonyms to have the same name?

According to Ammonius, the names must have the same accent, inflexion and breathing (or aspiration). Others add other requirements. Only David/Elias(?) points out that the names must belong to the same language, or linguistic community (*sunêtheia*), David (ascribed in *CAG* to Elias) *in Cat.* 141,11-16.

(5) Ammonius *in Cat.* 17,16-18,6

See how precisely he calls them not 'homonym' but 'homonyms', using the plural form of the word, since homonyms are thought of as many things, or at least two, but one never speaks this way in the case of one thing. One should know that homonyms always require these three things: accent, inflection, and breathing. For if we find names that differ in any one of these respects, they are not homonyms, as, for example, with *argós* and *Árgos* [the city]. The accent here is changed; the paroxytone accent means a city in Peloponnesus, the oxytone means a sluggish person. Because of the change in accent, then, these are not called homonyms. It is the same with inflection. For we say *ho elatês* and mean a charioteer, and we say *tês elatês* and mean the wood of the silver fir tree. Thus, because of the change in inflection, these are not homonyms either. We say the same about breathing, also. For we say *oion* and the word with rough breathing (*hoion*) means 'of what sort', but the unaspirated word (*oion*) means 'the only' and this is not a homonym either. With the word 'Ajax', however, the accent is the same and the inflection is the same, and even the breathing is the same for both. It will follow, therefore, that they [sc. the two heroes named 'Ajax'] are homonyms. MC & GMat

(iv) The kinds of homonymy

Porphyry distinguishes, among those things whose homonymy is not by mere chance, four reasons why they may share their name. They may be similar, or they may display analogy, which means that as A is to B, so C is to D. They may be derived from one thing (*aph' henos*) or contribute to one thing (*pros hen*), as a medical instrument derives from medicine or a healthy diet contributes to health. Other commentators connect 'contributing to' with Aristotle's final cause, and 'deriving from' with his efficient cause, or with the Platonist paradigmatic cause. They also take the opportunity to say where metaphor fits in, whether it is a form of homonymy at all, and if so, whether it belongs with similarity or analogy. We shall turn to that next. Besides Porphyry cf. Simplicius *in Cat.* 31,22-32,21; Ammonius *in Cat.* 21,14-22,10; Philoponus *in Cat.* 21,14-22,14; Olympiodorus *in Cat.* 34,27-35,14; David (Elias in *CAG*) *in Cat.* 139,29-140,25; Boethius *in Cat.*, *PL* 64, 166 B-C.

(6) Porphyry *in Cat.* 65,21-66,21

Q. What are chance homonyms?

A. Different things that have the same designation purely by chance and unintentionally: for example Alexander the son of Priam and Alexander the son of King Philip of Macedon. These are called chance homonyms: the others all depend on thought, as for example homonyms from similarity. Suppose I were to use the name 'man' both of a mortal rational animal and of a picture of a man – suppose I were to see it and say, 'That is a man'. Clearly it is not just a matter of chance that I call the thing in the picture a man: it is because it is an image of a living man. So it is due to thought that I call both the living man and the statue or picture 'man'.

[65,31] Again, when I call the unit the source (*arkhê*) of number, the point the source of line, a spring the source of a river, and the heart the source of the animal, the name 'source' is applied to a class of homonyms, to which I apply this common name because of the thought that they are analogous (*kat' analogian*). For as the unit is to the numbers, so the point is to lines, the spring to the river, and the heart to animals. This sort of relationship of reference [text uncertain] is what the geometers call 'analogy'. Hence the name 'source' (*arkhê*) is included under homonyms from analogy.

[66,2] A third sort of homonyms from thought occurs when different things get their common designation from some one thing. For example, the art of medicine is a single thing, yet we call a book a 'medical' book, a drug a 'medical' drug, and a scalpel a 'medical' instrument: they get these designations from the name of the art. The book is a medical book because it covers medical topics, the scalpel is a medical instrument because it is a tool used for making incisions in medical practice, and the drug is a medical drug because it is used by doctors in treating patients. So while these all have a common name, the account that corresponds to the name is different for each of the similarly designated things. They all derive the appellation

'medical' from the single art of medicine, and they have all been given their names by those who refer to them in this way not by chance, but from thought.

[66,12] There is a fourth sort of homonyms from thought, when different things that all seek the same goal receive a common designation from that goal. For instance, health is the goal of a person who is getting well, and food, walking, and reading can all be called 'healthy' derivatively from this. Some connect this type of homonym with homonyms from a single source, referring to the whole class as homonyms deriving from and relative to a single source. Others do not count these as homonyms at all, but not as synonyms either. Instead, they put them between homonyms and synonyms, because different things are all called 'medical' by participation in the same account, and similarly the things that are called 'healthy' are all so called because they preserve the same health. SS

Reading

John P. Anton, 'The Aristotelian doctrine of *homonyma* in the *Categories* and its Platonic antecedents', *Journal of the History of Philosophy* 6, 1968, 315-26.

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Sten Ebbesen, *Commentators and Commentaries on Aristotle's Sophistici Elenchi, Corpus Latinum Commentariorum in Aristotelem Graecorum* 7,1-3, vol. 1, Leiden 1981, 159-62, 181-6.

Sten Ebbesen, 'Les Grecs et l'ambiguité', in Irène Rosier, ed., *Cinques Études Historiques*, Lille 1988, 15-32.

Christos Evangeliou, *Aristotle's Categories and Porphyry*, Leiden 1988, 37-51.

Philippe Hoffmann, *Annuaire, École Pratique des Hautes Études*, vol. 93, 1984-5, 345-56.

Concetta Luna in I. Hadot, ed., *Simplicius, Commentaire sur les catégories*, fasc. 3, Leiden 1990, Commentary and Appendices, 37-179.

L. Tarán, 'Speusippus and Aristotle on homonymy and synonymy', *Hermes* 106, 1978, 73-99.

7(i) Metaphor

Porphyry reports that the Middle Platonist Atticus treated metaphor as a homonymy based on analogy. But Porphyry replies (similarly *ap.* Simplicium *in Cat.* 32,20-7) that in the case of metaphor, a thing already has a name of its own, but another name is transferred to it, whereas in the case of homonymy, the thing has no other name. Nonetheless, we find Olympiodorus, in the context of a discussion of homonyms, citing Themistius and treating metaphor as homonym by analogy. We also saw under **3(d)** that Dexippus treats the application of the term 'substance' to things in the intelligible world as a case of both metaphor and analogy (*in Cat.* 41,18), but he did not mention homonymy.

Galen had taken a view relevant to Porphyry's in book 3 of his *On Differences between Pulses*. He thinks that science should use words with a single meaning and that metaphor is a misuse of words, which is unnecessary in the case of tactile qualities because they all have names. He admits that not all smells have names

and asks if metaphor would be a legitimate remedy here, 3.7 (8.692 Kühn). This would violate Porphyry's later requirement that a thing named metaphorically already has a name of its own. But at 3.6 (8.675 Kühn) Galen says that it is more fitting to explain each thing by a reasoned account (*logos*) than to use a metaphor, at least for purposes of instruction, as opposed to short-hand reminder.

(1) Porphyry *in Cat.* 66,29-67,26

Q. You said that one type of homonyms was homonyms from analogy. Are there also homonyms from metaphor, and should they be classified under homonyms from analogy, or are these two distinct types? Should we class homonyms from metaphor with homonyms from analogy, or not?

A. Many commentators, among them Atticus, have erred in counting metaphor and analogy together as a single kind of homonymy, and have confused metaphor with analogy.

[67,3] Q. Tell us clearly what you mean by this.

A. I claim that metaphor occurs whenever a thing has a name of its own, but someone also uses of it another name, which he transfers to the thing (*metapherôn*) and uses of it as if it were its name. Here we would not have homonymy: homonymy occurs when the thing in question has no other name except the one in question. For example, the lower parts of a mountain are called its 'slopes' (*hupôreia*) :

But men dwelt on the slopes of Mt Ida, rich in springs. [Homer *Iliad* 20.218]

But although 'slopes' is the name for the lower parts of a mountain, poets often call them its 'feet' (*podes*):

All the feet of Mt Ida, rich in springs, were set trembling. [Homer *Iliad* 20.59]

And the parts of a bed that support the whole of its upper surface are also called its 'feet', and there are 'feet' of tables and ships as well:

For I had wielded the ship's foot [i.e. rudder] throughout ... [Homer *Odyssey* 10.32]

In the case of the 'feet' of a ship or of Mt Ida, one would not say that the word is being used homonymously. For what a ship has as the thing that holds it on course is properly called its 'rudder'. Nor would I say that the lower parts of a mountain are homonymously called its feet. For they have a name, viz. 'slopes'. But in the case of the 'feet' of tables and beds, I would say that this is no longer a case of metaphor, but rather of homonymy. For what supports the whole of a bed or a table does have this name by analogy with the feet of animals. Hence homonyms ought to be said to be those things that have 'the name only in common'. In the case of beds and tables, 'feet' is the name of the parts in question, whereas in the case of a mountain or a ship, the names of the corresponding parts are 'slopes' and 'rudder' respectively, and the appellation 'feet' is transferred to them in a different way: they are called 'feet' by analogy, and not homonymously. SS

(2) Olympiodorus *in Cat.* 35,3-8

[Homonyms are also distinguished] by reference to metaphor, as when we say 'shepherd' of the people or 'head' of a mountain or the 'feet' of Mt Ida. A metaphor is, as Themistius said, a concise analogy (*analogia*). And the man saying this is telling the truth. For when we give the analogy that just as the shepherd is to the flock so the king is among men, the metaphor, taking one element from each pair combines them concisely and calls the king shepherd of the people. MR

Reading

Sten Ebbesen, *Commentators and Commentaries on Aristotle's Sophistici Elenchi, Corpus Latinum Commentariorum in Aristotelem Graecorum* 7,1-3, vol. 1, Leiden 1981, 182-3.

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7(j) First and second imposition of expressions

Porphyry explains that after humans had applied expressions (*lexeis*) to 'man', 'white', etc., they made a second imposition (*thesis*) of names like 'noun' and 'verb'. The *Categories* is about the first imposition, *On Interpretation*, with its opening discussion of nouns and verbs, about the second. Failure by philosophers to notice the difference has led to misinterpretation of the *Categories* as being deficient, either because (Plotinus) it fails to deal with all things, or because (the Stoics Athenodorus and Cornutus) it fails to deal with all words. Dexippus gives another example of confusion that would have been avoided by observing this distinction: the problem about how 'genus' can be said of animal, but not of man. First and second imposition of names is also described by Ammonius *in Cat.* 11,8-17, partly translated in **7(c)** above.

(1) Porphyry *in Cat.* 57,24-58,3

In accordance with this relation between words (*onomata*) and things, this thing here is called a 'chair', that a 'man', this a 'dog', that 'the sun', and again, this colour is called 'white', that 'black', and this is called 'number', that 'size', this 'two cubits', and that 'three cubits'. In this way words and expressions (*lexeis*) have been assigned to each thing which serve to signify and reveal that thing by employing particular sounds of the voice (*phônê*). When certain expressions had been laid down as the primary tokens for things, man began to reflect upon the expressions that had been posited from another point of view, and saw that some are of such a kind as to be attached to certain articles (*arthra*): these he called 'nouns' (*onomata*). Others, such as 'walk' and 'walks', he called 'verbs' (*rhêmata*), indicating the qualitative differences between the two types of words by calling the one 'nouns' and the other 'verbs'. Thus calling this sort of thing 'gold' and

that material that shines so brightly 'the sun' belongs to the primary imposition (*prôtê thesis*) of words, while saying that the expression 'gold' is a noun belongs to their secondary imposition (*deutera thesis*), which signifies the qualitatively different types of expression. SS

(2) Porphyry *in Cat.* 58,30-59,17

Q. But if he here divides significant words into ten genera, why is it that in *On Interpretation* he divides them into two, namely nouns and verbs?

A. Because here he is discussing the primary imposition of expressions upon things, while in *On Interpretation* he is discussing their secondary imposition, which is no longer concerned with expressions that signify things *qua* signifying them but rather with expressions that signify types of words, *qua* being of such types. For being a noun or a verb is a type of word, and whether an expression has its proper use or is metaphorical or is in some other way figuratively used also belongs to the second sort of inquiry about words, not to the first.

Q. Has everyone who has written about the *Categories* been aware of this distinction?

A. Certainly not. Otherwise there would not have been those who took the investigation to be primarily about the genera of being, nor those who attacked the work and rejected the division of categories as being insufficiently comprehensive and as failing to include certain items, or again as containing extraneous ones.

Q. Who were the latter?

A. The followers of Athenodorus and Cornutus, who took the objects of the investigation to be expression *qua* expression, that is, expressions as used properly and figuratively and so forth, for these are differentiae of expression *qua* expression. Fixing upon these, they raised the question of what category they belonged to, and finding none, they complained that the division was incomplete, since it fails to include every sort of significant expression.

Q. Have all the commentators been mistaken about the subject matter of the *Categories*?

A. Certainly not. Boethus, in his commentary on the *Categories,* said what we have said, and so did Herminus, though briefly. SS

(3) Dexippus *in Cat.* 26,13-27,2

[27. Why is 'man' said of Socrates, but the 'species' (*eidos*) no longer so?]

Seleucus: How comes it that 'man' is said of Socrates, and 'species' of man, but 'species' is no longer predicable of Socrates; and 'animal' of man, and 'genus' of animal, but 'genus' is no longer predicable of man?

Dexippus: Because the higher terms are predicated of the subjects by name, but not by definition (*logos*); for neither, if one is replying to the question 'What is man?', will one say that it is the species, nor does the

definition of the species fit the term 'man'. And the same goes for the genus. Furthermore, the species and the genus are predicable of different things and are contradistinguished, the latter by reason of being not applicable to species, the former by not being applicable to individuals, whereas what are said of a subject are constitutive of its essence. And further, some things are said of *all* of a subject; e.g. every man could be reasonably said to be an animal, because there is nothing which falls under the description 'man' of which one cannot say that it is an animal; but to say that every man is a species would be false, and it is unsound to say that every animal is a genus; for the individual man is a man, but not a species, and the particular animal is an animal, but not a genus. So these are not said of all the given class, but will only be said of them in the way that commonalities (*koinotêtes*) are, and because the one is constitutive of the essence, while the other is indicative of the imposition of the name denoting a common relation (for this commonality that is predicated is not man or Socrates). This latter, then, seems rather to be indicative of the name, indicating in what context (*skhesis*) 'man' or 'animal' is being named, and some names are secondary to other, primary ones, but do not depend on the principal meaning of the expression (*lexeis*), nor do they signify the actual nature of the thing named, but indicate the characteristic (*kharaktêr*) according to which they are named. JD

Reading

Sten Ebbesen, 'Porphyry's legacy to logic: a reconstruction', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, 147-71.

7(k) Parts of speech and parts of sentence

The parts of a *sentence* (*logos*) for Aristotle, are said by Ammonius to be only noun and verb, and (as an interpretation perhaps of Aristotle *Int.* 16b22-5) that does not include the verb 'to be' in what we think of as its copulative use. Other parts are excluded, on the grounds, *in Int.* 12,29-30, that no combination of them can on its own create a sentence. Boethius, more leniently, allows certain things to be cognate (*cognate*) to nouns and verbs, namely participles, interjections, pronouns and adverbs, *in Int.*^{2}, 14,28-15,5.

Eight parts of *speech* (*lexis*) are recognised by Aristotle at *Poet.* 20, 1456b20; letter, syllable, conjunction, name, verb, article, case, sentence. But the Stoic use of the terms *logos* and *lexis* was different. It was the Stoics, not, as implied by Ammonius, Aristotle, who said that *lexis* was not necessarily meaningful. A Stoic example of *lexis* would be the meaningless word *blituri* and the elements (*stoikheia*) of Stoic *lexis* are letters. The Stoic parts of speech (*logos*), however, are *somewhat* closer to Aristotle's parts of *lexis*: proper name, common noun, verb, conjunction (including prepositions), article (including pronouns and demonstratives), adverb, Diogenes Laertius 7.56-7.

(1) Ammonius *in Int.* 12,16-13,9

So Aristotle divides into names and verbs all the things significative of natures, persons, activities, passions or some kind of combination of a

person with an action or passion. He calls those which are said with reference to time or predicated in propositions 'verbs', while those which are said without time or which have the function of subjects he calls 'names'. But those which are found in neither territory, even if they are added in another way to the propositions and signify that the predicate belongs or does not belong, or when, how, or how often it belongs to the subject, or that they have any other relation to one another, he does not want to call 'parts of the sentence' properly speaking. For just as the planks of a ship are properly speaking its parts, while bolts, sail-cloth and pitch are also added to hold them together and for the unity of the whole, in the same way in the sentence conjunctions, articles, prepositions and adverbs themselves fill the job of bolts (*gomphoi*), but they would not correctly be called parts inasmuch as they cannot be put together and on their own produce a complete sentence. So these are not parts of a sentence (*logos*), but they are parts of speech (*lexis*), of which the sentence itself is also a part, as has been said in [Aristotle] *Poetics* [20, 1456b20]. And these are useful for the specific sorts of composition (*sunthesis*) and construction (*suntaxis*) of the parts of the sentence with one another, just as a bond (*desmos*) [is useful] for adding unity to things bound and glue (*kolla*) to the things joined by it. But these are not parts of the things bound or glued, and neither are conjunctions, articles, prepositions, or adverbs 'particles' (*moria*) of the sentence.

The sentence differs from speech in that the former is an aggregate chiefly composed of the vocal sounds which signify things, while the latter consists of absolutely all the vocal sounds which are used in language. DB

(2) Ammonius *in Int.* 14,26-31

Thus, the part of the affirmation (*apophansis*) must always be either a name or a verb, but the verb is not always a part of the proposition (*protasis*), namely when it is not immediately predicated of the subject as having to signify an activity or a passion or simply the existence or non-existence of the subject, but is rather used for the sake of joining (*sunarmosai*) the predicate to the subject. DB

Reading

Catherine Atherton, *The Stoics on Ambiguity*, Cambridge 1993, 301.
J. Barnes, 'Ammonius and adverbs', *Oxford Studies in Ancient Philosophy* suppl. 1991, 145-63.
A.C. Lloyd, 'Grammar and metaphysics in the Stoa', in A.A. Long, ed., *Problems in Stoicism*, London 1971, 58-70.
G. Nuchelmans, *Theories of the Proposition*, Amsterdam 1973, chs 6 and 8.

7(l) The verb 'to be'

Aristotle at *On Interpretation* 16b19-25 says of the 'is' in sentences like 'Socrates is wise' that it itself is nothing, but it signifies in addition (*prossêmainein*) a combina-

tion (*sunthesis*), which cannot be thought of without the components. At 19b19-30, contrasting 'a man is just' with e.g. 'a man walks', he says that the 'is' in the former is predicated additionally (*proskatégoreisthai*) as a third component in the affirmation, but he says it is added to 'just'. At 21b9-10 he says that there is no difference between saying that a man walks and saying that a man *is* walking. At 21a25-8, he says that in 'Homer is a poet' the 'is' is predicated of Homer not in its own right, but only accidentally because of his being a poet. Evidently, this 'is' does not imply that Homer now exists, whereas an 'is' predicated in its own right would imply this. Presumably, then, we should take the 'is' to be predicated in its own right in 'Socrates is well', 'Socrates is sick'. For in another work, *Cat.* 13b12-19, Aristotle says that, if Socrates does not exist, neither of these is true, although,13b31-3, the negation, 'Socrates is not sick', is true.

Aristotle's treatment of 'Homer is a poet' as involving an accidental predication of 'is' is translated below under **11(b)**. The interpretations of Ammonius and Boethius are discussed there.

Alexander, Ammonius and Boethius agree that in 'Socrates is just' 'is' is added to the predicate 'just', Alexander *in An. Pr.* 10,9-10; Ammonius *in An. Pr.* 23,25-25,4; Boethius *in Int.*[2] 374,10-11 Meiser. Alexander adds that 'Every', 'No', 'Some' and 'Not every' in Aristotle's syllogistic propositions are annexed to the *subject* term, *in An. Pr.* 44,26-8.

Alexander and Ammonius agree that in 'Socrates is just', the 'is' is just a glue combining the terms and is not itself a term or part of the proposition, Alexander *in An. Pr.* 16,7-15; Ammonius *in Int.* 14,27,31; 160,10-14; 165,12-15.

Aristotle's pupil Eudemus, according to Alexander, *in An. Pr.* 16,15-17, argued on the other side that in 'Socrates is white' the 'is' is genuinely predicated, at least in some sense.

If we turn now to the simple 'Socrates is', Eudemus is reported in a scholium to Aristotle as declaring that 'is' is there predicated and is a term. Ammonius seems to agree at *in Int.* 14,18-23 that 'is' in 'Socrates is' is a *part* of the proposition. But Alexander *in An.Pr.* 15,15-22, speaking against Eudemus, says that 'Socrates is' is short for 'Socrates is in being', and says that really it is 'in being' that is the predicate term. Nonetheless, Alexander allows that when we use the abbreviation 'Socrates is', the 'is' does become a term and a part of the proposition. Ammonius repeats the analysis into 'Socrates is in being' at *in Int.* 57,29-32, but does not add the warning that 'in being' is the true predicate. Ammonius sides with Eudemus again at *in Int.* 165,16-22. He says that in 'Socrates, the philosopher, is', the 'is' is genuinely predicated, and not merely predicated in addition. But he adds something very interesting. He says that 'Socrates, the philosopher' forms a unit and is the subject of which 'is' is predicated.

In this last, he compares and contrasts with Matten and De Rijk. For they suggest that for Aristotle, in a sentence like 'Socrates is a philosopher', 'Socrates philosopher' is an already existing compound, and the function of 'is' is not to conjoin the two parts, as Alexander and Ammonius suppose, but to affirm that the compound state of affairs is the case. Similar compounds feature above in Simplicius' account of sentence meaning at *in Cat.* 396,31-397,25, translated under **7(a)**. An advantage that De Rijk claims for his interpretation is that it relieves Aristotle of any need to distinguish a copulative use of the verb 'to be' from an existential use, and it means that Aristotle is well equipped to distinguish non-assertive predications as in 'possibly Socrates is a philosopher', which others (J.L. Ackrill, H. Weidemann) have wished he would distinguish. On the view proposed, Aristotle analyses the assertive 'is' in 'Socrates is a philosopher' as meaning: obtains, holds, is the case. This is the so-called veridical use of 'is', which Charles Kahn has emphasised. But we now see that the analysis which De Rijk proposes

for 'Socrates is a philosopher', is extremely close to that proposed instead by Ammonius for 'Socrates, the philosopher, is'. There is still one difference, however: Ammonius insists on the definite article '*the*', and this is absent from De Rijk's analysis.

Charles Kahn has argued (1972), that the concept of the copula was prepared for not by Aristotle, but by his commentators, but that the concept was fully developed only in the Middle Ages, first by al-Farabi and then by Abelard.

(1) Aristotle *On Interpretation* 16b19-25

Verbs spoken just by themselves are names and signify something, because the speaker halts his thought (*dianoia*) and the hearer pauses. But the verb does not yet signify whether it is, or not. For not even 'to be' or 'not to be' is a sign of the thing (*pragma*), nor if you say simply 'that which is'. For it is nothing itself, but it signifies in addition a combination (*sunthesis*) which cannot be thought of without the components. RRKS

(2) Aristotle *On Interpretation* 19b19-30

When 'is' is *additionally* predicated as a third item, oppositions are expressed in two ways. I mean, for example, 'a man is just'. I say that 'is' constitutes a third name or verb in the affirmation. So, because of this, there are the following four cases, of which two will be related in respect of sequence to the affirmation and negation in the way the privations are, while two are not. I mean that 'is' will be added either to 'just' or to 'not-just', and so will the negation. So there will be four, but let us think of what is being said on the basis of the diagrams below.

A man is just / its negation, A man is not just
A man is not-just / its negation, A man is not not-just
'Is' and 'is not' are here added to 'just and 'not just'. RRKS

(3) Aristotle *On Interpretation* 21b9-10

There is no difference between saying that the person walks and that the person is walking. RRKS

(4) Alexander *in An. Pr.* 44,26-8

And again, the subject is that to which the quantitative determination of the proposition is annexed ('every' or 'no' or 'some' or 'not every') and the predicate is that to which is annexed 'is' or something equivalent to 'is' which includes 'is' potentially in itself. B,B,F,I

(5) Alexander *in An. Pr.* 16,7-17

Or else he adds 'when you add or remove "is" or "is not" ' in order to indicate that these items, i.e. 'is' and 'is not', are neither parts of the proposition nor

terms, but that both 'is' and 'is not' are external to the terms, either being added externally to the predicate terms when propositions are divided into terms or else being separated from them. For the addition or subtraction of these terms contributes nothing to the division of propositions into items: the terms in 'Socrates is white' seem to be 'Socrates' and 'white'. His expression would be more congruous if it were put in this way: 'when you add "is" or "is not" or remove them'.

Or is it absurd to claim that the 'is' in these propositions is not predicated in any sense? (Eudemus, in the first book of his *On Expression*, shows this at some length.) B,B,F,I

(6) Scholium to Aristotle 146a24-7 (= Eudemus fr. 27 Wehrli)

Eudemus in the first book of his *On Expression* shows at some length that the 'is' in simple propositions (such as 'Socrates is', 'Socrates is not') is predicated and is a term. B,B,F,I

(7) Alexander *in An. Pr.* 15,15-22

But 'is' does seem to be a term when it stands by itself, i.e. when it is predicated of the subject, as in 'Socrates is'. For here the 'is' seems to be the predicate term. But in fact, if you consider the case precisely, 'is' is not even here a term in its own right. For the proposition which says 'Socrates is' is equivalent to 'Socrates is being', in which not 'is' but 'being', which goes with 'is', forms the predicate term. Since 'is' seems to be equivalent to 'being' (for it is an inflected form of it), for the sake of brevity and in order not to appear to say the same thing twice, it alone is connected to the subject. And when it is connected in this way it becomes a term and a part of the proposition. B,B,F,I

(8) Ammonius *in Int.* 14,18-23

This is why he says that the assertoric sentence is always composed of and breaks up into a name and a verb, believing as he does that these alone are properly called 'parts of a sentence'. 'Be' and 'not be' belong, on this view, to the things predicated immediately of some things, in which case they become as much parts of the propositions as the subjects are, as in 'Socrates exists', 'Socrates does not exist'. DB

(9) Ammonius *in Int.* 165,16-22

But when 'is' is third in the proposition, it is not for that reason necessarily something *additionally* predicated (*proskatêgoreisthai*). At any rate, in the proposition saying 'Socrates, the philosopher, is', 'is' is simply predicated, and not *additionally* predicated. For this whole, 'Socrates the philosopher', is taken as one and becomes subject through the addition of the article

which tends not to be aligned with what is predicated, but only with subjects. About this subject it is said that he is, and is not yet dead. RRKS

Reading

Allan Bäck, *Aristotle's Theory of Predication*, Leiden 2000, ch. 9.
Jonathan Barnes, Susanne Bobzien, Kevin Flannery, Katerina Ierodiakonou, notes to the passages cited from Alexander in their translation, *Alexander of Aphrodisias, On Aristotle Prior Analytics 1.1-7*, a volume in the *Ancient Commentators on Aristotle* series.
David Blank, notes to the passages cited from Ammonius in his translation, *Ammonius, On Aristotle On Interpretation 1-8*, a volume in the *Ancient Commentators on Aristotle* series.
Manuel Correia, 'Boethius on syllogisms with negative premisses', *Ancient Philosophy* 21, 2001, 161-74.
Charles Kahn, *The Verb 'Be' in Ancient Greek*, Dordrecht 1973.
Charles Kahn, 'On the terminology for copula and existence', in S.M. Stern, Albert Hourani, Vivian Brown, eds, *Islamic Philosophy and the Classical Tradition, Essays presented to Richard Walzer*, Oxford 1972.
Mohan Matten, 'Greek ontology and the 'Is' of truth', *Phronesis* 28, 1983, 113-35.
L.M. De Rijk, 'Aristotle's semantics in *De Interpretatione* 1-4', in K.A. Algra, P.W. van der Horst, David T. Runia, eds, *Polyhistor: Studies in the History and Historiography of Ancient Philosophy Presented to Jaap Mansfeld*, Leiden 1996.

7(m) Speech acts and types of sentence

Aristotle at *Int.* 17a4 sets on one side sentences like prayers which do not admit truth and falsity as belonging to rhetoric or poetry. Alexander lists the five types of sentence accepted by Aristotelians at *in An. Pr.* 17,4-5. Ammonius and Boethius think these five sufficient: assertion, question, addressing someone, prayer, command. Ammonius criticises the Stoics for adding a further five. But Schenkeveld has argued that the Stoics made more distinctions because they were classifying not sentences, but the much more numerous functions performed by the utterance of sentences. The Stoic list distinguished yes-or-no question, wh-questions, questions to oneself, oaths, exclamations like 'how beautiful is the Acropolis', postulates about the universe and assumptions about geometrical figures.

(1) Ammonius *in Int.* 2,9-3,6

However, there are five kinds of sentence (*eidê tou logou*), namely the Vocative (*klêtikos*), as in: 'O happy Son of Atreus', the Imperative (*prostaktikos*), as in: 'Go! Away, swift Iris!', the Interrogative (*erôtêmatikos*), as in: 'Who and from where are you?', the Optative (*euktikos*), as in: 'If only, Father Zeus ...', and last of all the Assertoric (*apophantikos*), by which we make an assertion about anything at all, for example: 'But gods know all things', 'All soul is immortal'. Aristotle does not instruct us in this course about every simple sentence, but only about the Assertoric – and rightly so, for only this type of sentence is receptive of truth and falsity, and under this type fall demonstrations, for the sake of which the whole course in logic has been composed by the Philosopher [Aristotle].

The Stoics call the assertoric sentence a 'decision' (*axiôma*), the optative

an 'imprecative' (*aratikos*), the vocative an 'addressing' (*prosagoreutikos*), and they add to these five other kinds of sentence, which clearly can be brought back under the kinds already enumerated. Thus they say that one is a 'swearing' (*omotikos*), for example: 'Now let earth know this!', another is a 'positing' (*ekthetikos*), as in: 'Let this be a straight line!', another is a 'hypothetical' (*hypothetikos*), as in: 'Let it be assumed that the earth is the centre of the sphere of the sun!' and another is a 'quasi-decision' (*homoios axiômati*), for example: 'How pretentiously does Fortune toy with men's lives.' All of these, since they are receptive of both falsity and truth, could be subsumed under the assertoric: the assertion of the 'swearing' sentence has been needlessly lengthened by addition of the divinity as a witness, and that of the 'quasi-decision' by the addition of the emphatic adverb 'how'. And they say there is a fifth one in addition to these, namely the 'dubitative' (*epaporêtikos*), for example: 'Davos is here; what on earth will he announce, then?' This is evidently the same as the interrogative, except that it adds the reason for the question. DB

Reading

G. Nuchelmans, *Theories of the Proposition: Ancient and Medieval Conceptions of the Bearers of Truth and Falsity*, Amsterdam 1973, 97-9, esp. 128-9 and ch. 8.

D.M. Schenkeveld, 'Stoic and Peripatetic kinds of speech act and the distinction of grammatical moods', *Mnemosyne* 37, 1984, 291-353.

7(n) Communication and projection of concepts

In arguing that animals have reason (*logos*) because they have *uttered* (*prophorikos*, see **7(b)** above) *logos*, i.e. speech, Porphyry recognises the importance of *understanding* in linguistic communication. Animals not only understand what the individual speaker means; they also learn *Greek*. The latter would be true of both types of animal mentioned here, 3.4.4, of those who understand and those who (like parrots) imitate.

The fact that most people do not understand animals proves nothing: Greeks do not understand Indians, yet some people do understand animals, 3.3.4-3.4.1. Porphyry himself in Carthage reared a partridge which used distinctively human sounds in replying to him, 3.4.7. The significance of some of these points is considered by Richard Sorabji, *Animal Minds and Human Morals*, London & Ithaca, NY 1993, ch. 7.

Porphyry reflects a simple theory, based on Aristotle *Int.* 16a3-11, of what goes on in the mind of the speaker. What is experienced (*pathê, paskhein*) in the soul is thought (*dianoeisthai*), in other words silently voiced (*phôneisthai*), in the soul even before speaking, 3.3.2. The mental imagery (*phantasia*) is the same even in animals for whom it does not reach the tongue, 3.5.2.

We learn more from a passage translated above under **7(h)**. In understanding what is said, each human listener has to project (*proballesthai*) concepts (*ennoiai*) to match the words he is hearing (Simplicius *in Cat.* 24,9-13).

(1) Porphyry *Abstinence* 3.3.1-3.6.7

3 Now since there are two kinds of *logos*, one in [uttered] expression (*prophora*) and one in disposition (*diathesis*), let us begin with expressive

logos, logos organised by voice. (2) If expressive *logos* is voice signifying with the tongue that which is experienced (*pathê*) internally and in the soul (this is the most general definition, which does not depend on any school but only on the concept of *logos*), what in this is absent from those animals that speak? And why should not what an [animal] experiences (*paskhei*) have been thought (*dianoeisthai*) first before it says what it is going to say? By 'thought' I mean what is voiced silently in the soul. (3) Now since that which is voiced by the tongue is *logos* however it is voiced, whether in barbarian or Greek, dog or cattle fashion, animals which have a voice share in *logos*, humans speaking in accordance with human customs and animals in accordance with the customs each has acquired from the gods and nature. (4) And if we do not understand them, so what? Greeks do not understand Indian, nor do those brought up on Attic understand Scythian or Thracian or Syrian: the sound that each makes strikes the others like the calling of cranes. Yet for each their [language] can be written in letters and articulated, as ours can for us; but for us the [language] of Syrians, for instance, or Persians cannot be articulated or written, just as that of animals cannot be for any people. (5) For we are aware only of noise and sound, because we do not understand (for instance) Scythian conversation, and they seem to us to be calling and articulating nothing, but making one noise which is longer or shorter, whereas the modification of the noise to convey meaning does not strike us at all; yet to them their speech is easy to understand and very diverse, just as our accustomed speech is to us. Similarly in the case of animals, understanding comes to them in a way which is peculiar to each species, but we can hear only noise deficient in meaning, because no one who has been taught our language has taught us to translate into it what is said by animals. (6) Yet, if we are to believe the ancients and those who lived in our own time and our fathers' time, there are those who are said to have heard and understood the speech of animals. In ancient times there were Melampous and Tiresias and the like, and not long ago Apollonius of Tyana, of whom it is said that when he was with his companions a swallow flew over and called. 'The swallow,' he said, 'is telling other swallows that a donkey has fallen outside the town carrying a load of grain, which spilled on the ground when the load-bearer fell'. (7) A friend of mine used to relate how he was lucky enough to have a slave-boy who understood all the speech of birds, and everything they said was a prophecy announcing what would shortly happen; but he lost his understanding because his mother feared that he would be sent as a gift to the emperor, and urinated in his ears as he slept.

4 Let us pass over these stories because of our natural trait of incredulity; but no one, I think, is unaware that some peoples even now have a kind of affinity for understanding the speech of some animals. The Arabs listen to ravens, the Etruscans to eagles, and perhaps we and all humans would understand all animals, if a snake cleaned our ears too [sc. as happened to Melampous]. (2) As it is, the complexity and diversity of their speech demonstrates that it has meaning: animals are heard to speak differently

when they are afraid, when they are calling, when they are asking to be fed, when they are friendly and when they are challenging to a fight. (3) The diversity is so great that even those who have given their life to observing animals find it very difficult to distinguish the variations, because there are so many. Diviners have interpreted differences, up to a certain number, in the calls of crows and ravens, but they have left the rest as being difficult for a human to understand. (4) But when animals speak to each other clearly and meaningfully, even if not all of us can understand, and are even seen to imitate us and learn Greek and understand their owners, who would be so brazen as to deny that they have *logos* just because he cannot himself understand what they say? Ravens and jays and redbreasts and parrots imitate people and remember what they hear and, when they are taught, respond to their teacher; and many, because of what they have learned, have informed on wrongdoers within the household. (5) The Indian hyena, which the natives call 'corocotta', speaks in so human a way, even without a teacher, that it prowls around houses and calls whoever looks like an easy prey, imitating their nearest and dearest and the speech to which the person called would respond in all circumstances. So the Indians, even though they know this, are deceived by the resemblance, go out in response to the call and get eaten. (6) But if not all animals imitate us or can easily learn our [language], so what? Not every human being finds it easy to learn or to imitate not just animal [language], but even five or so human languages. And perhaps some animals do not speak because they are not taught, or because they are impeded by the vocal organs. (7) I myself reared, at Carthage, a tame partridge which flew to me, and as time went on and habit made it very tame, I observed it not only making up to me and being attentive and playing, but even speaking in response to my speech and, so far as was possible, replying, differently from the way that partridges call to each other. It did not speak when I was silent; it only responded when I spoke.

5 It is reported that even some voiceless animals readily respond to their master, more so than a human friend would. A lamprey which belonged to the Roman Crassus would come to him when called by name, and had such an effect on him that he mourned when it died, though he had earlier borne with moderation the loss of three children. Many people say that the eels in the Arethusa fountain and the perch in the Maeander respond when they are called. (2) So the impression (*phantasia*) is the same as in one who speaks, whether or not it reaches the tongue. How then can it not be ignorant to call only human language *logos*, because we understand it, and to dismiss the language of other animals? (3) It is as if ravens claimed that theirs was the only language, and we lack *logos*, because we say things which are not meaningful to them, or the people of Attica said that Attic is the only language, and thought that others who do not share the Attic way of speaking lack *logos*. Yet the Attic speaker would understand a raven sooner than he would a Syrian or Persian speaking Syrian or Persian. (4) But surely it is absurd to judge rationality or non-rationality by whether

speech is or is not easy to understand, or by silence or voice. That way one would also say that the god who is above all, and the other gods, lack *logos* because they do not speak. (5) But the gods communicate with us in silence, and birds understand them more quickly than humans do, and having understood pass on the message as best they can, different birds being envoys to humans from different gods: the eagle for Zeus, the falcon and the raven for Apollo, the stork for Hera, the *krex* and the owl for Athena, the crane for Demeter, and others for others. (6) Moreover, those of us who observe animals and live with them know their calls. The huntsman recognises from the response of the barking dog that it is searching for the hare, then that it has found, then that it is chasing, then that it has caught; and if it is lost, he knows that it is lost. (7) And the herdsman knows that the cow is hungry or thirsty or tired or in heat or looking for her calf. The lion shows by roaring that it is threatening, the wolf by howling that it is suffering, and the bleating of the sheep alerts the shepherd to what they need.

6 Nor are animals unaware of the voice of humans, whether the humans are angry or friendly or calling, whether the voice is hunting or wanting something or giving something, in short, whatever it is doing: to every one they respond appropriately. They could not do this unless like worked upon like in understanding (*sunesis*). (2) Deer and bulls and other animals are calmed by music, and become tame instead of savage. (3) And even those who decree that animals lack *logos* say [Chrysippus, the Stoic] that dogs understand dialectic, and make use of a multiple disjunction when they are tracking and reach a crossroads. 'The beast has gone down this road, or that one, or the other. It didn't go down this one, or this one, so it was this one, and all that remains is to follow it down this'. (4) But there is an obvious response: animals do this by nature, because no one has taught them, as if we too had not acquired *logos* by nature, even if we ourselves posit some words because we are naturally well equipped to do so. (5) But if we are to believe Aristotle [*HA* 536b17-19; cf. 608a17], animals have been seen teaching their young not only to do other things but even to speak, as the nightingale teaches her chick to sing. And as he says himself, animals learn many things from each other, and many things from humans; and everyone testifies that he spoke truly – every horse-breaker and groom and rider and charioteer, every huntsman and mahout and herdsman and all the trainers of wild animals and birds. (6) A well-informed person concedes understanding (*sunesis*) to animals on this evidence; an ignorant person who has done no research about them is carried away, collaborating with his own aggression towards them. How, indeed, would he not abuse and misrepresent creatures he has chosen to carve up as if they were stone? (7) But Aristotle and Plato, Empedocles and Pythagoras and Democritus, and all who have sought to grasp the truth about animals, have recognised that they share in *logos*. GC

(2) Simplicius *in Cat.* 24,9-13, translated under **7(h)** above

Reading

Richard Sorabji, *Animal Minds and Human Morals*, London and Ithaca, NY 1993, ch. 7.

7(o) Learning language

Wittgenstein opens his *Philosophical Investigations* by attacking rather unjustly Augustine's account of learning language. But Wittgenstein does not deny the importance or distinctiveness of the human practice of looking and pointing with mother (shared attention), which even apes appear to lack, and of simultaneously naming which humans seem to understand naturally. Moreover, Augustine seems to refer to some of the further things that Wittgenstein thought important, first to the origin of language in groans and other natural expression which had already been described in Latin on behalf of the Epicureans by Lucretius (see **7(c)** above), and secondly to its source in interactive pursuit and avoidance.

(1) Augustine *Confessions* 1.8.13, 1.14.23

With groans and various sounds and various movements of parts of my body I would seek to express the feelings of my heart, to get people to obey my will. I would not be able to express all I wanted, nor to express it to everyone I wanted. I thought by means of memory. When they named some object and, having spoken, moved their bodies accordingly towards something, I saw and retained the fact that they called that object by this sound which they produced when they wanted to indicate (*ostendere*) it. That they wanted this was made evident by the movements of their body which are like natural words for all races and which are effected by the face, the inclination of the eyes, the activity of other parts of the body and the tone of voice which reveals (*indicare*) the mind's sentiments (*affectio*) concerning things to be sought, retained, rejected, or avoided. Thus, I gradually gathered what objects were signified (*rerum signa*) by words placed in their positions in various sentences and frequently heard. And through the words I already announced my wishes, when my mouth was trained in those signs (*signa*). Thus in the company of those whom I was among, I communicated the signs of the wishes that were to be announced. ...

[1.14.23] At one time as an infant, I also knew no Latin, and yet by attending I learnt without any fear or torment, amidst the blandishments of my nurses, the jokes of people laughing at things, and the fun enjoyed by people playing games. RRKS

Reading

M.F. Burnyeat, 'Wittgenstein and Augustine *De Magistro*', in G.B. Matthews, *The Augustinian Tradition*, Berkeley, Los Angeles 1999, 286-303.

8. Syllogism

Within logic in a stricter sense, a central issue was the nature of syllogism. There is a valuable explanation of relevant logical terminology in Alexander in Jonathan Barnes, Susanne Bobzien, Kevin Flannery, Katerina Ierodiakonou, *Alexander of Aphrodisias: On Aristotle Prior Analytics 1.1-7*, in the *Ancient Commentators on Aristotle* series, London & Ithaca, NY 1991, 17-33.

8(a) Aristotelians vs. Stoics and Galen on syllogism

(i) The contrast

Aristotelians and Stoics refused to accept each other's examples of syllogism. The Stoics, according to Diogenes Laertius *Lives* 7.78, defined syllogistic arguments (*logoi*) as being those arguments which either were one of their five indemonstrable arguments, or were reducible (*anagesthai*) to one of those indemonstrables by means of one of at least four rules called *themata*. (We may compare how Aristotle had sought to reduce all syllogisms to those of his first figure). Stoic syllogisms relate to each other whole propositions such as: it is day; it is light. If we symbolise such propositions with p and q, the five indemonstrable arguments (Diogenes Laertius 7.80-1; cf. Galen *Institutio Logica* ch. 6, sec. 6) can be represented as follows:

if p, then q; but p; therefore q
if p, then q; but not q; therefore not p
not both p and q; but p; therefore not q
p or q; but p; therefore not q
p or q; but not q; therefore p

Aristotle had conceived of syllogisms as arguments with two premisses and a conclusion. Each of these three propositions related one term to another, for example mortality to animals, or to men, telling us that mortality belongs to all animals, or to none, or to some, or to some not. If we symbolise the terms with A, B and C, then Aristotle's preferred example of a syllogism would be represented by:

A belongs to all B
B belongs to all C
A belongs to all C

The actual definition of a syllogism is given by Aristotle at:

(1) Aristotle *Prior Analytics* 1.1, 24b18-22

A syllogism is an argument (*logos*) in which certain things are posited and something different from the things laid down follows of necessity by (dative) their being the case. By 'by their being the case' I mean that it

follows because (*dia*) of them, and by 'it follows because of them' that no external term is needed in addition for generating the necessity. RRKS

(ii) Can Aristotelian syllogism discuss comparative size?

The Stoics accepted certain valid arguments which they conceded were not valid methodically, i.e. in a manner conforming to rules. Alexander tried to respond by recasting these arguments as Aristotelian syllogisms. Alexander's rival Galen pointed out that these arguments included arguments in the mathematical sciences, which Aristotelians particularly wanted to cover, for example, mathematical arguments about the comparative sizes of three entities. But Galen thought, *Institutio Logica* ch. 16, that they should be recognised as a distinct type of syllogism involving relation, rather than being forced into the pattern of categorical syllogisms. Alexander's attempts so to force them are illustrated in what follows.

Reading

Jonathan Barnes, 'A third sort of syllogism: Galen and the logic of relations', in R.W. Sharples, ed., *Modern Thinkers and Ancient Thinkers. The Stanley Victor Keeling Memorial Lectures*, 1981-1991, London 1993, 172-94, also in Portuguese, *Análise* 2, Lisbon 1985, 35-61.

Jonathan Barnes, 'Logical form and logical matter', in A. Alberti, ed., *Logica, mente e persona*, Florence 1990.

(2) Alexander *in An. Pr.* 21,28-22,7

In general, if something is deduced, yet not from the suppositions but by the co-assumption of some other premiss, then this will be called necessary but it is not thereby a syllogism. The arguments which the Stoics say conclude unmethodically are of this sort. Thus you might say:

The first is greater than the second. But the second is greater than the third. Therefore: the first is greater than the third.

This follows necessarily, but not syllogistically – not unless you co-assume a premiss from outside which says:

What is greater than something greater is also greater than what is smaller than it.

The same sort of argument occurs in the first book of Euclid's *Elements*, viz.:

This is equal to this. But this is equal to this. Therefore: this is equal to this.

This is indeed true – but there is need of a universal premiss if it is to be deduced syllogistically. The premiss is this:

Things equal to the same thing are also equal to one another. B,B,F,I

(3) Alexander *in Top.* 14,21-7

For if A equals B and similarly C equals B, it has not thereby been syllogistically proved that A equals C, since the necessity of this is not 'through the suppositions': the conclusion only follows from the supposi-

tions on the strength of the truth of the universal that things equal to the same thing are also equal to one another.

[14,24] This is why when this has been affirmed and the divided premiss is put and brought together into the one premiss 'A and C are equal to the same thing, B', it can now be deduced syllogistically that A equals C. JMvO

(4) Alexander *in An. Pr.* 344,20-7

Similar to this is thinking one can show syllogistically that A is greater than C by assuming that A is greater than B, and B greater than C. This does follow necessarily, but is not yet a syllogism, until a universal premiss is co-assumed, saying 'everything greater than something which is greater than some other thing is also greater than that which is smaller than that something'. The two things laid down become in the syllogism a single premiss, the minor, which says, 'A is greater than B which is greater than C'. For in this way it will be concluded syllogistically that A is greater than C. RRKS

(iii) Stoic syllogisms with one premiss

A later Stoic, Antipater, rejecting the orthodox Stoic view of Chrysippus, allowed syllogisms with one premiss, but Alexander defends Aristotle's insistence on two premisses.

(5) Alexander *in An. Pr.* 17,18-18,2

The so-called single-assumption arguments are sometimes thought to be syllogisms inasmuch as when you hear them you add the second premiss because it is well known. For

You are breathing – Therefore: you are alive,

seems to be a syllogism because the hearer himself adds the second premiss:

Everyone who is breathing is alive,

which is well known. Were this not well known, no one would concede the conclusion

Therefore: you are alive, on the basis of you are breathing –

rather, they would demand a reason. A syllogism is supposed to be the assembling of a conclusion from the premisses, and this cannot be done from a single premiss.

Even if something quite certainly follows from some single item by necessity, it does not thereby follow syllogistically. For it is not the case that, because a syllogism has a conclusion which follows necessarily from the suppositions, then if one thing follows necessarily from another it follows syllogistically as well. For necessity is of wider extension than the syllogism. Thus in implications and relations and in sound continuous or

conditional propositions, the consequent follows the antecedent by necessity, but they are not thereby syllogisms. In case of:

If it is day, it is light,

its being light follows by necessity from its being day – but not syllogistically. Similarly, to err follows from to steal, and to wrong from to assault; but these are not therefore syllogisms.

It is the proper characteristic of a syllogism that it proves necessity from a plurality of items. B,B,F,I

(6) Alexander *in Top.* 8,14-23

He says 'things having been posited', not 'thing –', as critics of this formula claim that he should have, because nothing is proved syllogistically through just one assumption being obtained, but everything from at least two. For what Antipater calls 'single-assumption syllogisms', such as

It is day – Therefore: it is light

and

You breathe – Therefore: you are alive

are not syllogisms but cases of deficiency in requesting [premisses]. [8,19] The syllogistic proof that

It is light

is on the grounds that

It is light if it is day – and it is day.

And [8,20] the conclusion that

You are alive

is deduced from the fact that

He who breathes is alive – and that you are breathing,

or because

Everyone who breathes is alive – and you are breathing.

That

It is light

does not simply follow from

It is day,

nor that

You are alive

from

You are breathing. JMvO

(iv) Aristotelians against indemonstrable hypothetical premisses of Stoics

For the rest, Alexander is completely unrepentant, since, as Ian Mueller and Michael Frede have shown, he thinks a syllogism is an instrument (*organon*) which needs to perform a useful purpose (*khreia*) of showing or revealing something which would not have been apparent without the syllogism. Chrysippus' five indemonstrables do not meet this purpose, since they use not only categorical (predicative) premisses, but hypothetical ones, hypothetical in the broad sense

which includes not only conditionals (if-then), but also disjunctions (either-or) and 'not-both' premisses. None of these tell us whether something does or does not belong to something else, Alexander *in An. Pr.* 265,13-16; 17,5-10. Worse, they allow the conclusion in some cases to be identical with a premiss, *in An. Pr.* 18,15-19,3; *in Top.* 9,22-10,7. Insofar as some Stoic premisses are categorical, they are either not known to be true, or, it is alleged, require an Aristotelian syllogism to prove them, *in An. Pr.* 265,8-10; 17-19. Further, the premisses 'if p then q, but p' leave nothing new to be revealed in the conclusion, 'q', perhaps because 'if p then q' is an explicit licence to infer q, given p, *in An. Pr.* 263,7-11; 265,3-8.

(7) Alexander *in An. Pr.* 17,5-10

Some people think that 'posited' [in the account of syllogistic premisses quoted in **8(a)** above from Aristotle *An. Pr.* 24b18-22] does not mean simply 'assumed' but makes clear what sort of thing must be assumed. For that the propositions assumed for a syllogism must be predicative is – they say – shown by the word 'posited' (it is these propositions which Aristotle has defined); for he will prove that hypothetical propositions, in and of themselves, do not produce syllogisms. This – they say – is why he says 'posited' and not 'assumed'. B,B,F,I

(8) Alexander *in An. Pr.* 18,15-19,3

No syllogistic utility is provided by the argument:

If it is day, it is light, but it is day, therefore: it is day

– nor generally by those which the more recent thinkers call non-differently concluding arguments. (These include the duplicated arguments, such as If it is day, it is day, but it is day, therefore: it is day.)

This sort of thing may indeed have a syllogistic figure and a syllogistic combination, but it is certainly not a syllogism. For syllogisms are instruments, and they are introduced for some useful purpose – for proving something. Hence what is not useful is not a syllogism.

We shall see that arguments of this kind are useless if we run through the species of syllogism and ask in which of them it could be appropriate to infer one of the suppositions. Is it appropriate in demonstrative syllogisms? – No: they attempt to reveal what is unclear by way of what is clear and known, what is posterior by way of what is primary. In dialectical syllogisms? – No: what an interlocutor is unwilling to concede they attempt to prove by way of what is reputable and conceded by him, bringing him to a contradiction. In eristic syllogisms? – No: their purpose, too, is to bring the respondent to a contradiction or an apparent contradiction on the basis of what he grants. They do not conclude to what he grants: they conclude, on the basis of what he grants, to what he is unwilling to grant. Clearly, then, they will infer something different from what is granted. Now if a genus exists in its species, and if the syllogism is the genus of its species, and if in none of the species is what is inferred the same as what is assumed, then this will not be so of syllogisms in general. B,B,F,I

(9) Alexander *in Top.* 9,22-10,7

By this addition [*Topics* 1.1, 100a25ff.: the syllogistic conclusion is 'different from the premisses'. Cf. under **8(a)** above the very similar wording in *An. Pr.* 24b18-19] Aristotle effectively shows that the syllogism is an instrument. The use of the syllogism is to make clear what is not held to be known through things that are known and clear; [9,25] so if it is not possible for a thing to be at once clear and unclear, then the use of the syllogism does not seem to be preserved in cases where what is proved is not different from the things that prove it. But an argument which does not serve the use of the syllogism is not a syllogism, for if the syllogism is an instrument, and every instrument is useful, then the syllogism is useful, but arguments in which what is inferred is the same as one of suppositions are not useful: [9,30] therefore arguments in which what is inferred is the same as one of the suppositions are not syllogisms. That instruments are useful is clear: with all instruments we see that they are discarded when they cannot serve the use that is appropriate to them. [10,1] A lyre that cannot be used for music would not be called a lyre, nor an adze that cannot be used for carpentry an adze; if we go on calling them by the same name when they lose their use we are speaking homonymously, as with engraved or moulded figures such as a hand made of stone. [10,5] No more would a syllogism still be a syllogism that does not preserve the use of a syllogism. And syllogisms in which the conclusion is the same as one of the suppositions are of this sort. JMvO

(10) Alexander *in An. Pr.* 265,3-9

What they call 'tropic' is in all cases introduced as obvious by hypothesis and agreement. But for the most part, what is turned into an assumption or co-assumed needs showing, if such arguments are to be at all useful. For where what is turned into an assumption does not need showing, what is produced is not a syllogism, since everything is obvious. But if it needed showing, yet was assumed without having been shown, nothing will have been shown and nothing will have been syllogised. RRKS

(11) Alexander *in An. Pr.* 263,7-11

If what was co-assumed was not in need of showing, but obvious and known, like the conditional premiss, such an argument would no longer be a syllogism. For such an argument cannot in the first place serve any of the purpose of a syllogism, since a syllogism must show what is not known without syllogising. RRKS

Finally, Alexander objects that 'q follows from p' will arbitrarily differ from 'if p, then q' in not qualifying as meeting the Stoic syllogistic form. Moreover, the Stoic *themata*, or rules for reducing arguments to the five indemonstrables are borrowed

from the Aristotelians' own 'synthetic theorem', as well as being applied regardless of utility.

(12) Alexander *in An. Pr.* 373,29-35

But the more recent people [Stoics] follow verbal expressions, not what the expressions mean. They say it is not the same when terms are transformed into equivalent expressions. For although 'if A, then B' means the same as 'B follows from A', they say that there is a syllogistic argument when expressions are taken of the form, 'if A then B; but A; therefore B', but that 'B follows from A; but A; therefore B' is not a syllogistic, but a conclusive argument. RRKS

(13) Alexander in *An. Pr.* 284,11-17

...the synthetic theorem. Aristotle's circle handed this down and valued it by its utility (*khreia*), so far as its utility demanded. But the Stoics took it from them, divided it up and made out of it what they call the second, third and fourth *themata*, neglecting utility (*khrêsimon*), expatiating in emulation about everything whatever that can be said on such a subject, even if it is useless. RRKS

Reading

Jonathan Barnes, Susanne Bobzien, Kevin Flannery, Katerina Ierodiakonou, introduction to *Alexander of Aphrodisias: On Aristotle Prior Analytics 1.1-7*, in the *Ancient Commentators on Aristotle* series, London & Ithaca, NY, 1991.

Susanne Bobzien, 'Stoic syllogistic', *Oxford Studies in Ancient Philosophy* 14, 1996, 133-92.

Michael Frede, 'Stoic vs. Aristotelian syllogistic', *Archiv für Geschichte der Philosophie* 56, 1974, 1-32, repr. in his *Essays in Ancient Philosophy*, Minneapolis, 1987.

Mario Mignucci, 'Alexander of Aphrodisias on inference and syllogism', in I. Angelelli, ed., *Estudios de Historia de la Logica*, Actas del *II Simposio de Historia de la Logica*, Pamplona 1990, 381-412.

Ian Mueller, 'Stoic and Peripatetic logic', *Archiv für Geschichte der Philosophie* 51, 1969, 173-87.

(v) Can wholly hypothetical arguments be reduced to Aristotelian categoricals?

Aristotle discusses hypothetical arguments including reduction to the impossible, at *An. Pr.* 40b25-6; 41a21-b3; 46b29-35; 50a16-b3. These last involve but cannot be reduced to (*analuein*) categorical syllogisms. According to Ammonius *in An. Pr.* 69,11-28 and Philoponus *in An. Pr.* 246,15-32, they also involve the Stoic 2nd and 5th indemonstrables.

Reading

Katerina Ierodiakonou, 'Zeno's arguments' in Dory Scaltsas, ed., *Zeno of Kition and his Legacy*, Institute of Classical Studies, University of London, 2003.

Alexander went further on hypothetical syllogisms: he thought some reduction (*anagein*) was possible. The hardest case would be that in which all the propositions assumed were hypothetical. Alexander objects to such wholly hypothetical syllogisms at *in An. Pr.* 265, on the same grounds as (in **8(a)** above) he brings against partly hypothetical ones. But he says, *in An. Pr.* 326, that even for this case, Aristotle's immediate successor, Theophrastus, had achieved some kind of reduction. How it worked we are not told, except that it depended on an analogy between the A, B and C standing for terms in Aristotle's categorical syllogisms and the A, B and C standing for propositions in such a schema as: if A, then B; if B, then C; therefore if A, then C. In the latter case too, a repeated middle term, B, is needed. And the possible variations can, as with categorical syllogisms, be arranged into three figures, according to how the middle term is positioned in the two premisses. The fullest treatment of these wholly hypothetical syllogisms, but with no attempt to reduce them to categorical, is given by Boethius in *de hypotheticis syllogismis*. Christopher Martin has argued that the usual view of this as propositional logic is wrong.

(14) Alexander *in An. Pr.* 265,13-16; 17-19

The type of syllogism that is hypothetical throughout is useless for showing and positing that something is the case. For a thing is not shown to belong to something, or not to belong, either universally or in some cases, which [Aristotle] said was the distinctive property of syllogism. ... And utility and syllogistic power come to hypothetical arguments from categorical syllogisms. RRKS

(15) Alexander *in An. Pr.* 326,20-9

However, wholly hypothetical arguments also reduce, in another way, to the three figures mentioned earlier, as Theophrastus has proved in the first book of the *Prior Analytics*. An argument of the following sort is wholly hypothetical:

If A, then B – If B, then C – Therefore: if A, then C.

(Here the conclusion too is hypothetical.) E.g.:

If he is a man, he is an animal – If he is an animal, he is a substance
Therefore: if he is a man, he is a substance.

Now since here too there must be some middle term in virtue of which the premisses connect with one another (for if not, here too it is impossible for there to be any concludent pairing), this middle term will be positioned in three ways in pairings of this sort too.

When it is consequent in one of the premisses and antecedent in the other, we will have the first figure. JB

Reading

Jonathan Barnes, 'Terms and sentences', *Proceedings of the British Academy* 69, 1983, 279-326.

Jonathan Barnes, 'Theophrastus and hypothetical syllogistic', in William W. Fortenbaugh *et al.*, ed., *Theophrastus of Eresus, on His Life and Work, Rutgers University Studies in Classical Humanities* 2, 1985, 125-41.

William W. Fortenbaugh, 'Cicero *On Invention* 1.51-77: hypothetical syllogistic and the early Peripatetics', *Rhetorica* 16, 1998, 25-46.
Katerina Ierodiakonou, 'The hypothetical syllogisms in the Greek and Latin medieval traditions', *Cahiers de l'Institut du moyen âge grec et latin* 66, Copenhagen 1996, 96-116.
Christopher J. Martin, 'The logic of negation in Boethius', *Phronesis* 35, 1991, 277-304.

8(b) Fourth syllogistic figure

Aristotle recognised three figures of syllogism. Theophrastus collected several moods which Aristotle had treated piecemeal and assigned them to Aristotle's first figure. But an otherwise unknown Aratus tells us that more recent people (possibly Stoics?) had argued that these really constituted a fourth figure. Rescher seeks to resuscitate the case for Galen having done this.

(1) Aratus *Compendium* ed. K. Kalbfleisch, *Jahr. f. d. kl. Philol.*, suppl. 23, 1897, p. 707

Problem: Aristotle and his followers thought that there could be no other figure besides these. For, he believed, if there are three terms, there is no other way in which the middle term can be placed in relation to the extreme terms. But Theophrastus and Eudemus added certain other combinations to the first figure besides the ones set out by Aristotle, about which I shall say more later, which some more recent students held to constitute a fourth figure, attributing this doctrine to Galen as its father. They use the following argument to establish their point: if it is possible to place the middle term in any other relation with the extreme terms, besides those already mentioned, there will be another syllogistic figure besides those already mentioned. But the first is the case, therefore the second also. The minor premiss [i.e. the protasis of the conditional sentence just enunciated] is demonstrated as follows: it is possible for the middle term to be predicated of the major and to be the subject of the minor, contrariwise to the first figure, e.g. 'Every man is an animal, every animal is a substance, therefore some substance is a man'. 'Man' is the major term, because it is the predicate in the conclusion, 'substance' the minor term, because it is the subject in the conclusion; 'animal', the middle term, is predicated of 'man' and is the subject of 'substance', the minor term.

Reply: the figures set out by the Philosopher [Aristotle] are not incomplete, as his true followers agree. For if one were to examine the arguments of the opposition, one will find that it is not the different relation of the middle term to the extremes that makes the difference in such syllogisms, but the transposition of the premisses and the conversion of the conclusion, predicating the minor term of the major; for in other respects the terms are identical with those of first-figure syllogisms. HBG

Reading

H.B. Gottschalk, 'Towards a prehistory of the "fourth" syllogistic figure', *Liverpool*

Classical Papers 3, supplement of *Liverpool Classical Monthly*, 150th issue, 1993, 59-70.
Nicholas Rescher, *Galen and the Syllogism*, Pittsburgh 1966.

8(c) Aristotle's 'perfect' syllogisms

Aristotle defined perfect syllogisms, *An. Pr.* 24b22-6, as having their necessity apparent without depending on anything extra beyond the premisses (i.e. without extra logical operations like conversion). He thought that only syllogisms in his first figure were perfect. Later Aristotelians, perhaps Theophrastus and certainly Boethus, and many Neoplatonists thought that syllogisms in the second and third figures were perfect too. When Themistius backed Aristotle, the Emperor Julian himself is said to have arbitrated against him.

(1) Ammonius *in An. Pr.* 31,11-25

It must be recognised that Aristotle was of this opinion, that is that syllogisms in the second and third figure are all imperfect. But Boethus, who came eleventh after Aristotle, had an opposite opinion to Aristotle's on this, rightly opining and demonstrating that all syllogisms in the second and third figures are perfect. Boethus was followed by Porphyry, Iamblichus, and again by Maximus the pupil of Iamblichus' pupil Hierios. Themistius, the paraphrast, came to be of the opposite opinion, which Aristotle held. Since these two, Maximus and Themistius, were holding opposite opinions on this, and, as they thought, establishing their opinions, the Emperor Julian arbitrated between them on the matter, and gave his vote to Maximus, Iamblichus, Porphyry and Boethus. Apparently, Theophrastus also, Aristotle's own pupil, held the opposite view on it to Aristotle. The views derived from Boethus were followed by the great Proclus, and by his pupil, our father [Hermeias], namely that all syllogisms in the second and third figure are perfect. RRKS

Reading
Günther Patzig, *Aristotle's Theory of the Syllogism*, translated from the German of the 2nd edition, 1963, by Jonathan Barnes, Dordrecht 1968, 69-84.

8(d) Syllogisms concerning every case and most cases

Alexander takes up Aristotle's suggestion in *An. Pr.* 1.3, 25b15ff. that some disciplines use syllogistic premisses that only tell us what happens for the most part. He considers (see also *in An. Pr.* 165,8-15; 300,3-12) that these are the stochastic arts like medicine. According to *in Top.* 32,26-34,5, and Alexander(?) *Quaest.* 2.16, 61,23-8, translated in **Psychology 17(c)**, medicine is stochastic because, although its goal (*telos*) is to cure, this cannot always be achieved, and the job (*ergon*) of medicine is therefore the more modest one of doing everything possible (*endekhomenon, par' autas*), that conforms with the art of medicine, towards curing.

Alexander further, much more decidedly than Aristotle, understands 'for the most part' in terms of statistical frequency. Cf. his incipient tendency towards

treating necessary propositions in terms of frequencies as those that hold true at all times, illustrated in **10(b)** below.

Syllogisms that only told us what happens for the most part would not be valid, because a majority of a majority is not necessarily an overall majority. Alexander may have sensed this, because, as Sharples points out, he weakens the conclusion at *in An. Pr.* 40,3 to its being possible (*endekhesthai*) that venesection will cure. At 165,10-14, as Sharples points out, he tries strengthening one premiss, so that it drops the qualification, 'for the most part': 'the winds are now settled'.

(1) Alexander *in An. Pr.* 39,19-40,5

He [Aristotle *An. Pr.* 25b14] set down only this sort of contingency – what holds for the most part and is by nature (for what is by nature holds for the most part), since only this sort is useful for syllogistic purposes. The possible also covers what holds in equal part and what holds for the lesser part, but syllogisms with matter of this kind are no use. For no art and no science deals with this sort of contingency and possibility. For in the case of such matter the opposite will hold no more and no less than what is proved syllogistically to hold – and in the case of what holds for the lesser part, it is actually the opposite that holds more than what is deduced – as Aristotle will himself say when he discusses syllogisms of the contingent [see *An. Pr.* 32b18-22]. Thus he deals only with the kind of contingency and possibility which holds for the most part and which is by nature or according to nature (which itself holds for the most part). For some natural events are indeed proved on such a basis, and there are some arts concerned with what is in this way contingent – for instance the stochastic arts. A doctor assumes that someone who is ill in such-and-such a way is for the most part unwell from surfeit, and that someone who is unwell from surfeit is for the most part cured by venesection; and he deduces that it is contingently possible that someone who is ill in this way will be cured by venesection. Taking this to be so, he performs a venesection. For this reason there is syllogistic utility in these things. B,B,F,I

(2) Alexander *in An. Pr.* 165,9-14

Many arts, being stochastic, reason syllogistically to their proposed objective starting from what is in this way [sc. for the most part] contingently possible, e.g. medicine, navigation and gymnastics. In fact in general, what is grasped as a result of deliberation is shown through contingency of this kind. E.g. suppose someone was seeking whether one ought to set sail now, and grasped that when the winds are settled, sailors are for the most part safe, but the winds are now settled, so those who set sail now will be for the most part safe. RRKS

Reading

Katerina Ierodiakonou, 'Alexander of Aphrodisias on medicine as a stochastic art',

in P. van der Eijk, ed., *Ancient Medicine in its Socio-cultural Context*, Amsterdam & Atlanta, GA 1995, 473-85.

R.W. Sharples, 'Alexander of Aphrodisias on the compounding of probabilities', *Liverpool Classical Monthly* 7, 1982, 74-5.

9. Induction and Certainty

9(a) Induction

As pointed out by Frans de Haas (work in progress), Alexander insists on Aristotle's definition of inductive argument as proceeding through individual things to the universal. He rejects the (Epicurean?) account of it as argument from similars to a similar, which he says is more appropriate as an account of example.

But induction faces a problem. Its conclusion concerning the universal has no necessity, because we cannot review all the inexhaustibly many instances. Alexander's worry is voiced also by Simplicius in Phys. 1075,4-20, translated in **5(c)** above. Even if we could review all the instances, we would still not get a necessary conclusion about any one of them, because, if that instance was covered by the review, no conclusion would be needed, and if it was not, no conclusion would follow necessarily.

It exacerbates the problem that the Neoplatonists accept Aristotle's belief that nature is not perfectly uniform, at least as regards particular natures, even if not as regards nature as a whole, **Physics 1(g) and (h)**.

(1) Alexander *in Top.* 86,9-13

Induction, says Aristotle, is proceeding 'through the particulars to the universal'. Therefore it is unsound to say, as some do, that induction is an argument from the similar to the similar, since the universal is not similar to what comes under it, and induction is first of all meant to show the universal. 'Argument from similar things to another similar one' would be more apt to signify the example. JMvO

(2) Alexander *in Top.* 86,24-8

So induction has the quality of persuasiveness; but it does not have that of necessity. For the universal does not follow by necessity from the particulars once these have been conceded, because we cannot get something through induction by going over all the particular cases, since the particular cases are impossible to go through. JMvO

(3) Alexander *in Top.* 13,11-17

The addition of 'by necessity' in the definition sets the syllogism apart from induction, for induction too is an utterance 'in which, certain things having posited, something different from these suppositions follows', but not 'by necessity', since what is proved in inductions is not necessary, on the ground that it is neither possible to obtain all the instances through which

the proof of the point at issue is established, [13,15] nor possible, if these have not all been obtained, to claim that the universal too is by necessity, just as was each of the instances that were obtained. JMvO

9(b) Innate *logoi* to fill the necessity gap

Several solutions were put forward for filling the necessity gap left by induction. It was suggested by some late Neoplatonists, as de Haas has again pointed out, that our innate universal concepts, or *logoi*, enabled us to compensate for the necessity gap and recognise the universal conclusion safely. Philoponus further canvasses the idea that natural kinds have essences, and whatever feature can be proved (*dedeiktai*) to belong to one specimen, is thereby shown to belong to all. But this is only acceptable if the feature is shown to follow necessarily from the essence.

(1) Proclus *in Parm.* 981,5-9; 24-41

In demonstrations and definitions the particular must be entirely subordinate to the universal and the definition. Definitions of common features in particulars do not comprehend the particulars as a whole. ...

If we are, then, to discover the definition which will serve as the principle of a demonstration, the definition must be of an entity of such a sort as to comprehend everything more particular than itself. Such things are the forms (*eidê*) in us, and not those inherent in particulars. Therefore, if these are abolished, definition will no longer be possible. So the science of definition will disappear, along with that of demonstration, departing from the range of human thought. Furthermore, following on these, the science of division will become a mere name; for divisions do nothing other than distinguish the many from the one, and separate off those things preexisting in a unified manner in the whole into their proper differentiae, not adding the differentiae from without, but viewing them as being within, in the genera themselves, dividing off the species from one another. Where, then, would be the task of this science, if really existent forms were not present in us? FDH

(2) Philoponus *in DA* 4,4-32

Since we said that opinion (*doxa*) knows 'that it is', but is ignorant about the 'why', and that opinion knows the universal in the sensibles, as well as the conclusions of discursive [arguments] (*dianoêta*), it is worth asking from where opinion's knowledge of the universal in the sensibles is derived. What delivers the demonstration that every man is two-footed which opinion takes over and possesses as a conclusion within itself, as in the case of discursive [arguments] opinion takes over and possesses the conclusion that the soul is immortal after discursive reason (*dianoia*) has proven it? For this discursive reason does not demonstrate this – I mean that every man is two-footed or every horse is able to neigh etc. For it is impossible to establish the universal from particulars. For it is not possible to say that

because Xanthos and Balios and the horses in this place or that are four-footed, all horses are, nor is it evident that because this or that Ethiopian is black, every Ethiopian is black. So it is clear that discursive reason does not demonstrate what is sensible. It is also obvious that neither imagination nor sense perception can, and when we have discussed them, it will be even more obvious. For each of them knows a particular thing. From where, then is opinion's knowledge about the universal in respect of sensibles derived?

[4,20] We say that it is certainly possible in a way that discursive reason (*dianoia*) infers the universal in sensibles too, as Aristotle did [*Cael.* 2.11, 291b17ff.] in the case of the stars when he wanted to prove that they are spherical, and established this from one example, the moon. For if whatever applies to one thing also applies to things with the same essence (*homoousia*), it is necessary that it applies to all of them. Since all stars have the same essence, and it is has been proved (*dedeiktai*) that the moon is spherical, it is clear that the other stars are spherical too. When someone has seen smoke he infers that there is also fire in that place, as follows: in that place there is smoke; all smoke is a result of fire; so in that place there is fire. So perhaps, as I said, it is possible to infer the universal with respect to some sensibles, even if not all.

[4,30] However, I claim that the rational soul has the *logoi* of things in itself as parts of its essence, and because they are sunken in matter they are buried, so to speak, just as a spark is hidden in the ashes. FDH

(3) Simplicius *in Phys.* 1075,10-15, translated under **5(c)** above

(4) Olympiodorus on Phaedo, lecture 12.1, lines 9-25, translated under **5(c)** above

9(c) Spotting the essence by intellect from one example

Aristotle talks of intellectual *spotting* – I believe this is sometimes the force of his talk of *nous* – and rightly, I believe, says that *spotting* may be what has to happen if we are to grasp the universal defining feature of a natural kind, *An. Post.* 2.19, 100b12; 15. He also speaks of being good at spotting, *ankhinoia*, *An. Post.* 1.34. Reasonably again, he says, *An. Post.* 1.31, that we might spot (*noêsai*) how the burning glass works in all cases, just from seeing light passing through pores in the glass, and in *An. Post.* 2.2, that if we were on the moon, we might come to know that universally lunar eclipse is distinguished as due to the earth's screening, just from seeing the earth act as a screen. Philoponus differs in the passage quoted above in **9(b),** *in DA* 4,20-6, to the extent that he ascribes to discursive reason (*dianoia*) Aristotle's ability to infer from a proof of the sphericity of the moon that necessarily all the other stars are spherical since they are of the same essence (*homoousia*). But this presupposes that the essence has already been spotted.

(1) Aristotle *An. Post.* 1.31, 88a12-17

There are some things which we would not go on seeking, if we saw them, not because we know them by seeing, but because from seeing we would have the universal. For example, if we saw the glass perforated and light passing through, it would also be clear why the glass burns, by seeing it separately for each glass, and at the same time spotting (*noêsai*) that it is this way with all. RRKS

(2) Aristotle *An. Post.* 2.2, 90a26

But if we were on the moon, we would not be seeking whether eclipse occurs or why, but both would be clear together. For from perceiving, it would come to us to know the universal too. The perception is that [the moon] is now screened, since it is clear that it is now eclipsed, but from this the universal would come to us. RRKS

(3) Philoponus *in DA* 4,20-6, translated in **9(b)** above

Reading

Richard Sorabji, *Animal Minds and Human Morals,* London & Ithaca, NY 1993, 58-9.

9(d) Tekmeriodic proof to fill the gap

Don Morrison has drawn attention to what he sees as an alternative approach, which represents a striking adaptation of Aristotle. Aristotle had discussed irrefutable necessary signs, *tekmêria*, like having milk as a sign of having conceived, *Rhet.* 1357b3-5; 1402b12-21; *An. Pr.* 70a6-9; b1-6.

(1) Aristotle *Rhet.* 1403a13-15

If it is clear both that the fact obtains and that it is a *tekmêrion*, it becomes irrefutable (*aluton*). For everything thereby becomes a clear demonstration (*apodeixis*). RRKS

According to Morrison (but see de Haas), some late Neoplatonists on this basis believe that necessity can be found. For we can produce irrefutable tekmeriodic proofs or demonstrations, which infer the fundamental cause of things from effects, i.e. the prior from the posterior. Tekmeriodic proof is distinct from induction, Philoponus *in An. Post.* 49,19-21, and is a kind of demonstration (*apodeixis*), though an inferior kind. Alexander had denied that there could be demonstration from posteriors, but Themistius already accepted it as an inferior kind.

(2) Philoponus *in Phys.* 9,11-17

We need to be aware that Aristotle himself said, in the *Posterior Analytics*, that there are two ways of acquiring scientific understanding, (a) the

demonstrative method, (b) the didactic method, and that these are in opposition to each other. For the demonstrative method demonstrates secondary things from things that are first and more fundamental in nature, while the didactic method, although it is also a demonstrative approach, demonstrates things that are prior from things that are posterior in nature, according to an inferior standard of demonstration; this approach he also calls 'evidential' (*tekmêriôdês*). CO

(3) Philoponus *in An. Post.* 31,8-17

Because what is more intelligible by nature is not inevitably more intelligible to us, it often happens that we gain arguments (*pisteis*) about what is prior by starting from what is posterior, since what is prior is, I said, not more intelligible to us. This kind of proof (*deixis*) is called tekmeriodic and irrefutable, which is why it was also called demonstration. Demonstration in the proper sense, as I said, establishes what is secondary starting from what is prior, when what is by nature first and intelligible coincides with being more intelligible to us. But when this is not available and we are compelled to gain arguments (*pistousthai*) about prior things starting from posterior, this kind of proof is called tekmeriodic, yet because of the irrefutability of tekmeriodic evidence, it was thought worthy of the name of demonstration. RRKS

(4) Philoponus *in An. Post.* 49,5-14; 17-21

Establishing what is prior starting from what is posterior does not always yield necessity. But it does when the posterior is irrefutable tekmeriodic evidence, for example, when there is ash, that there was fire here at some time, or, given that the moon is illuminated in this way, that it is spherical. If, however, it were established from a woman's being pale that she has given birth, the sign is refutable and such a thing would in no way be called demonstration. Even in the case of irrefutable tekmeriodic evidence, we will not describe such a thing as demonstration in the proper sense, but will describe it by the whole expression 'tekmeriodic demonstration', if effects must be established from causes, which is the special feature of demonstration in the proper sense, not causes from effects ...

For it has been said that priority is of two kinds, one related to nature, one to us. Demonstration in the proper sense establishes what is secondary from what is first by nature, tekmeriodic demonstration the prior from the posterior. Proof by induction (*epagôgê*) is also of this kind, establishing universals from particulars, that is prior things from posterior. RRKS

(5) Philoponus *in An. Post.* 168,19-169,8

Another kind of difference occurs when both types of syllogism reach their conclusion through immediate premisses, both the syllogism of the fact and

the syllogism of the reason for the fact. But the syllogism of the reason for the fact reasons out the effect from the cause, while that of the fact reasons out the cause from the effect. Such are the proofs called tekmeriodic.

[168,23] But we must grasp it again from an earlier point as follows. Some causes and effects reciprocate and some do not. For example, if there is fire, there is inevitably ash, and if there is ash, there is inevitably fire. Similarly with the illumination of the moon: if it is illuminated like this, as it evidently is, it is inevitably spherical and if it is spherical, it is inevitably illuminated like this. Where cause and effect reciprocate with each other, we often establish the cause from the effect, because of the effect's being more intelligible than the cause, as when we prove that the moon is spherical from its illumination. Yet the illumination is not the cause of the sphericity, but vice versa, so this is called a syllogism of the fact, since the moon's sphericity is reasoned out from the illumination. Similarly with, 'there is ash here; where there is ash, there was fire; therefore there was fire here'. If we were to say, 'there is fire here; where there is fire, inevitably there is ash; so there is ash here', the syllogism is of the reason why, since the effect is reasoned out from the cause. But the other syllogism is of the fact, because the cause was reasoned out from the effect. And since such things are irrefutable, they are called signs, and this is demonstration according to an inferior standard, or, in full, tekmeriodic demonstration. RRKS

(6) Simplicius *in Phys.* 18,24-9

Thirdly, it is worth noticing what kind of demonstration it is that deals with things in nature. If it is those who know the first principles and causes of things in nature who have any knowledge of things in nature, and if these principles are discovered by us starting from what is composite and confused and cannot be known accurately, if the causes are not known accurately, it is clear that knowledge of the first principles is tekmeriodic and not demonstrative. RRKS

(7) Simplicius *in Phys.* 15,1-25

If all discursive teaching and learning comes about from first principles, and it is impossible to get first principles of first principles, learning would run into an impasse. So Aristotle instructs us on the method for knowing first principles, but we must begin a little further back. Everything known is either self-evident and a first principle of knowledge through being agreed, as is the case with definitions and the premisses that are called immediate. Or it is known through some prior knowledge of definitions and immediate premisses, as is the case with everything known through syllogisms and demonstration. Clearly, then, the first principles of the things in nature which are composite [lacuna: <are either self-evident or demonstrable>]. That these are not self-evident is clear from the diverse

conceptions of natural scientists who postulate first principles different from each other, as we shall discover. If the first principles are demonstrated, they must be demonstrated through something better known, since all teaching and all learning is discursive, that is, it comes about not from sense perception, nor in accordance with an intellectual recognition, but by syllogism and demonstration from prior knowledge, as we have learnt in the *Posterior Analytics*. But what is better known is accepted either as first principles and causes of what is demonstrated, as happens in demonstrations proper. For these are generated from the first principles and causes of the subject matter, as when we reason out that the world is beautiful from the Creator being good, or that the soul is immortal from its being self-moving. Or alternatively what is better known is accepted as necessarily following what is demonstrated and for that reason at the same time including it. For example, we show God is good from the world being beautiful and orderly, since the latter is closer to hand for us as a matter of observation, and we show the soul is self-moving from the fact that animate bodies are moved from within. This method of syllogising is tekmeriodic, rather than demonstrative. RRKS

(8) Alexander *in Metaph.* 13,13

There is no demonstration through what is posterior. WED

(9) Themistius *in Phys.* 1,20-2,3

So when we give an account of the composites (*sunkeimena*) we shall demonstrate our point from what is prior by nature, whereas when [we give an account] of the principles [we shall demonstrate our point] from what is prior to us. The former is demonstration properly speaking (*kuriôs*), the latter – though not [demonstration] properly speaking – is sufficient for us. FDH

Reading

Frans de Haas, review of Daniel A. DiLiscia *et al.* eds, *Method and Order in Renaissance Philosophy of Nature* (cited below), in *Renaissance Studies* 13, no. 3, 1999, 349-52.

Don Morrison, 'Philoponus and Simplicius on tekmeriodic proof', in Daniel A. DiLiscia, Eckhard Kessler, Charlotte Methuen, eds, *Method and Order in Renaissance Philosophy of Nature: The Aristotle Commentary Tradition*, Aldershot 1997, 1-22.

9(e) Analysis

Tekmeriodic proof is one kind of analysis. Aristotle borrows from geometry the idea of analysis in such passages as *An. Post.* 78a6-13; *EN* 1112b15-24; *EE* 1227b28-33. The main texts on geometrical analysis are Pappus of Alexandria 7.1 and a scholium to Euclid *Elements* 13.1-5, printed in Heiberg's Euclid 4.363-6.

9(e) Analysis

The Middle Platonist Alcinous, in his treatise *Didaskalikos*, tries to connect analysis with Plato and distinguishes three kinds of analysis, corresponding to procedures described by Plato in the *Symposium*, *Republic* and *Phaedo* respectively. Of the general characterisations in Alexander, Themistius and Philoponus, that in Philoponus perhaps gives the clearest idea. A theorem deduced from higher principles can instead be analysed in order to infer what those higher principles are from which it is deduced. Elsewhere Philoponus and Elias emphasise that this may involve discovering the cause or explanation.

(1) Alcinous *Didaskalikos* 5.4-6, 157,11-27, 36-43 Whittaker

There are three types of analysis:

1. that which is an ascent to first intelligibles from perceptibles;

2. that which is an ascent through what is proved and shown to those premisses which are indemonstrable and immediate; and

3. that which is an ascent proceeding from hypothesis to unhypothetical principles.

ad 1 The first type is like when we proceed from the beauty of bodies to the beauty in souls, and from this to that in ways of living, then from this to that in laws, then to the great sea of beauty, so that proceeding in this way we might find in the end Beauty itself. LSchr

ad 2 The second type of analysis is like this: we must hypothesise the object of inquiry and investigate which things are prior to it and demonstrate them by ascending from the posterior to the prior until we reach the first thing which is agreed upon. Starting from the first we shall descend again to the object of inquiry by way of synthesis....

ad 3 Analysis from hypothesis is like this: when one is inquiring into something, one makes this itself a hypothesis, then one investigates what follows from this hypothesis, and if one has to account for the hypothesis, one hypothesises another one and investigates if the first hypothesis follows from the second, and in this way one proceeds until one reaches a principle that is not a hypothesis (*anhupotheton*). FDH

(2) Alexander *in An. Pr.* 7,13-15

They are called *Analytics* because the reduction of any compound to the things from which it is compounded is called analysis. Analysing is the converse of compounding; for compounding is a route from the principles to what depends on them, whereas analysing is a return route from the end up to the principles. B,B,F,I

(3) Themistius *in Phys.* 1,18-20

We perform analysis by moving from composites to what is simpler and prior in nature, whereas nature constructs composites out of simples. RRKS

(4) Philoponus *in An. Post.* 162,16-28

The geometers give the name 'analysis' to the discovery of premisses through which some true conclusion is deduced. For example, if there was proposed to us the true conclusion that this triangle is equilateral, the method by which we find the premisses for deducing this is called by them 'analysis'. As things are, if it is proposed to us to find how to construct an equilateral triangle, we shall find the conclusion through premisses, starting from [something] agreed, and conclude with what is sought. Such a procedure is called synthesis. Analysis is the reverse of synthesis. Taking as agreed what was previously being sought, namely that this triangle is equilateral, we seek what the premisses would be for establishing this, so as to perform an analysis from that proposition and find the premisses, until we reach agreed propositions and geometrical first principles. And it is a matter of the greatest acumen to be able in this way to see at a glance (*sunoran*) from what sort of premisses each conclusion is deduced. RRKS

(5) Philoponus(?) *in An. Post. 2*, 335,9-21

By analysis the principles of this are discovered by us going up from the effects prior to us to that prior in nature, i.e., causes. For we know first by perception that the moon is eclipsed. And discursive reasoning (*dianoia*) examining again (*anapsêlaphêsasa*) later discovers the cause; for it says 'the moon is eclipsed; that which is eclipsed is blocked; therefore the moon is blocked.' This is analysis going from the effects to the cause. Then demonstration goes down from the causes to the effects: 'the moon is blocked; that which is blocked is eclipsed; therefore the moon is eclipsed.' Again, we see the earth quaking, and we say 'the earth quakes; when it quakes, the wind in its cavities and caves is shut off; in the earth the wind is shut off' – this is analysis. Then the demonstration: 'in the earth the wind is shut off, when wind is shut off, then there is a quaking; thus a quaking occurs in the earth.' LSchr

(6) Elias *in Isag.* 37,9-16

There are four dialectical problems: if it is (*ei esti*), what it is (*ti estin*), what sort of thing it is (*hopoion ti esti*) and through what it is (*dia ti esti*). And the one 'if it is' is analogous to division (for 'if it is' completely falls under division), and 'what it is' [belongs] to definition [lacuna] (for all demonstrations are of 'what sort of thing it is', for seldom is the [question] 'if it is' disputed and there is no demonstration of a definition) and the 'through what it is' is analogous to analysis – each of these is a discovery of a cause. LSchr

Reading

Norman Gulley, 'Greek geometrical analysis', *Phronesis* 3, 1958, 1-14.

Jaakko Hintikka and Unto Remes, *The Method of Analysis: its geometrical origin and its general significance, Boston Studies in the Philosophy of Science*, vol. 25, Dordrecht 1974.

Katerina Ierodiakonou, *Analysis in Stoic Logic*, PhD diss., University of London, 1990.

Don Morrison, 'Philoponus and Simplicius on tekmeriodic proof', in Daniel A. DiLiscia, Eckhard Kessler, Charlotte Methuen, eds, *Method and Order in Renaissance Philosophy of Nature: The Aristotle Commentary Tradition*, Aldershot 1997, 1-22.

Lawrence Schrenk, 'Proof and discovery in Aristotle and the later Greek tradition; a prolegomenon to a study of analysis and synthesis', in his (ed.) *Aristotle in Late Antiquity, Studies in Philosophy and the History of Philosophy*, Catholic University of America, vol. 27, 1994, 92-108. See his note 18 for further bibliography on mathematical analysis.

9(f) Scepticism and philosophy

Flückiger has pointed out that the Sceptics (*ephektikoi*) are discussed unfavourably by the commentators in two contexts, that of Aristotle *Metaphysics* 4, and that of the distinction of philosophical sects (*haireseis*) as the opening question in Alexandrian commentaries on Aristotle's *Categories*. Ammonius even says that the sceptics were thought unworthy of the name of philosopher. They are taken to have been refuted by Plato *Theaetetus*, wielding a pragmatic self-refutation, by Aristotle *Metaph.* 4 and by Galen. Genequand has pointed out that Alexander *On the Cosmos* concludes with rejection of Scepticism. However, for positive sceptical influence in other contexts, see, on Plotinus, Wallis and Crystal, and, on Damascius, Sorabji.

(1) Ammonius *in Cat.* 2,8-11

[Schools (*haireseis*)] are also named from their method of disputation in philosophy, like the philosophers who suspend judgement (*ephektikoi*), who were not thought even at all worthy of the name of philosophers, because they inquired into the nature of things, but did not succeed. RRKS

(2) Alexander *On the Cosmos* 150-1

But we should not for all that reject what we have come to believe and think by way of reflection and philosophising. Generally speaking, we must believe what we have investigated, scrutinised and clarified, and, before examining the doubts that have been raised about it and solving them, [we must] examine the matter itself and try to discern its truth, as does a man concerning what is proper to himself and regards himself; (151) and [we should] not, on account of some slight doubts, aim at expanding our discourse and becoming long-winded, which would make the meaning obscure and conceal its elegance; rather we should obtain, by means of the sciences which are not doubtful, confirmation of what we previously imagined to be doubtful in these sciences, and not reject it. CG

Reading

Ian Crystal, 'Plotinus on the structure of self-intellection', *Phronesis* 43, 1998, 264-86.

Hans Flückiger, 'Die ephektikoi in den Kommentatoren', in Aldo Brancacci, ed., *III Colloquio internazionale sulla filosofia d'eta imperiale*, Rome, forthcoming.

Charles Genequand, *Alexander of Aphrodisias On the Cosmos*, Leiden 2001, 3.

I. Hadot, *Simplicius, Commentaire sur les Catégories*, fasc. 1, Leiden 1990, 57-60.

A. Lingiuti, *L'ultimo platonismo greco. Principi e conoscenza*, Florence 1990, esp. 37-43.

Dominic J. O'Meara, 'Scepticism and ineffability in Plotinus', *Phronesis* 45, 2000, 240-51.

Sara Rappe, 'Damascius's skeptical affiliations', *The Ancient World* 29, 1998.

Sara Rappe, 'Skepticism in the sixth century? Damascius' *Doubts and Solutions concerning First Principles*', *Journal of the History of Philosophy* 36, 1998, 337-60.

Richard Sorabji, *Time, Creation and the Continuum*, London & Ithaca, NY 1983, ch. 5

R.T. Wallis, 'Scepticism and Neoplatonism', *Aufstieg und Niedergang der römischen Welt*, 2.32.2, 1987, 922-5.

10. Modal Logic

Modal logic, the logic of necessity and possibility, is partly illustrated in **Physics 5**. Aristotle invented modal logic and devoted *Prior Analytics* 1.8-22 to syllogisms involving statements of necessity and possibility. Ian Mueller explains Aristotle's modal system and Alexander's interpretation of it in the introduction and appendixes to his first two volumes of translation of Alexander, *Alexander of Aphrodisias: On Aristotle Prior Analytics 1.8-13* and *1.14-22*, in the *Ancient Commentators on Aristotle* series, London and Ithaca, NY 1999.

Since the contingent does not, in Alexander's view, presently hold, a contingent proposition is distinguished from a proposition which is concerned simply with what holds (*huparkhousa protasis*). The latter is here translated 'actual proposition', following Barnes, Bobzien, Flannery and Ierodiakonou. It affirms neither possibility nor necessity.

10(a) What kind of possibility is contingency (*endekhomenon*)?

Aristotle at *An. Pr.* 32a18-21 defines the contingent in the strict sense as what is possible, but not necessary. Alexander at *in An. Pr.* 156,11-22; 37,28-38,10 takes it to be not presently actual either. At 161,3-26 he tries to tackle the resulting problem that, in that case, we cannot convert and infer from 'contingently p' to 'contingently not-p' or vice versa. Aristotle had insisted we can, at 32a29-35, and if that sounds odd, it will cease to do so if 'possibly' is substituted for 'contingently'.

(1) Alexander *in An. Pr.* 37,28-38,10

He [Aristotle] showed us the homonymy of 'contingent' in *On Interpretation* [13, 23a7-20] too. For we apply 'It is contingent' to what is necessary when we say that it is contingent that animal holds of every human; and to what is actual if we say of what holds of something that it is contingent that it holds. Here [Aristotle *An. Pr.* 1.3, 25a38] he indicates what holds with the words 'the non-necessary'; for what holds differs in this way from what is necessary while sharing with it the fact of holding at the present time. Note the expression: what holds contingently is the same as what is signified by an actual (*huparkhousa*) proposition. 'Contingent' is also applied to what is possible. He will explain what this means a little later on when he says [25b14-15] 'Those which are said to be contingent inasmuch as they hold for the most part and by nature – this is the way in which we determine the contingent.' IM

(2) Alexander *in An. Pr.* 156,8-22

[Aristotle *An. Pr.* 32a18]: 'I call P "contingent" or say it "is contingent" that

P, if P is not necessary and if, when P is posited to hold, nothing impossible will be because of it. For we call what is necessary "contingent" in a [different] homonymous sense'.

[156,11] Since he [Aristotle] is going to discuss syllogisms from contingent premisses, he first defines the contingent. He does not define it in its homonymous use since it is not possible to define something as it is used homonymously. Rather he isolates contingency as said of the necessary and the actual from the contingent. For he showed that the contingent is also predicated of these things.

[156,15] By saying 'when [P] is posited to hold' he indicates that, in addition to not being necessary, the contingent is not actual either. For what is contingent according to the third adjunct (*prosrêsis* [the third type of modal addition, according to Alexander *in An. Pr.* 26,29-27,1]) is of this kind and it differs from what is necessary and what is actual because if P is said to be possible (*dunasthai*), P is not yet (*mêdepô*) the case. So, P would be contingent in the strict sense if P is not the case and if when P is posited to be the case it has nothing impossible as a consequent. And he would have spoken more strictly about the contingent if he said 'P is not the case and if, when P is posited to hold ...'. For although what is not the case is not necessary, what is not necessary is not *ipso facto* not the case. IM

(3) Alexander *in An. Pr.* 161,3-26

I inquired how, if the contingent is such as it was defined to be and is neither necessary nor actual, nevertheless negative contingent propositions will convert with affirmative contingent ones, with contingency in the way specified being preserved in both. For suppose if it is contingent that X is, then X is not yet – for this is thought to be the peculiar feature of the contingent, that what is said to be contingent is not yet; then what is contingent will not hold. And if it is contingent that X is not, X does not yet not hold; therefore it holds; thus a [contingent] affirmative is true when an actual negative holds, and a negative one is true when an actual affirmative holds. But it is impossible that both [affirmative and negative] hold at the same time. Therefore, contingency in the way specified cannot be being taken in the negative proposition.

[161,12] Or did he for this reason define [32a19, quoted in last passage] the contingent by saying that P is contingent 'if P is not necessary' without adding that P absolutely does not hold on the grounds that not holding is not the peculiar feature of the contingent; rather, the peculiar feature is that when it does not hold and is hypothesised to hold, nothing impossible follows from it. He also indicated that he means this by saying 'For we call what is necessary "contingent" in a homonymous sense' without adding 'and also the actual' – which should have been a necessary implication [if what holds is not contingent]; for [in fact] when we call the actual contingent we do not speak in a homonymous sense.

[161,18] It is not the case that, since if 'It is contingent that X is' is true

of something, 'It is contingent that X is not' is also true of it, it is thereby also true that when one is true the other is; but [they may also be true] at alternating times. For it is when X holds, not when it does not hold, that it is contingent that it does not hold. For if X does not hold and it is contingent that it does hold, then it is also contingent that X does not hold when it does hold.

[161.23] Alternatively, if 'It is contingent' is said of things which are not yet, then 'It is contingent that X is' might be said instead of 'It is contingent that X comes about'. But if X is not and it is contingent that X comes about, it is always also contingent that X does not come about, so that both would apply to what is not yet. IM

Reading

R.W. Sharples, 'Alexander of Aphrodisias: problems about possibility I', *Bulletin of the Institute of Classical Studies* 29, 1982, 91-108.

10(b) Alexander: necessity and contingency partly reduced to time

Diodorus Cronus gave a temporalised account of the possible as what either is or will be. It has been debated how far Aristotle gave a corresponding account of possibility and necessity. On one view (Sorabji, *Necessity, Cause and Blame* ch. 8, 128-37), it is only in relation to the everlasting predicates of everlasting subjects that Aristotle believes what is always so to be necessarily so. Alexander at *in An. Pr.* 26,3-14 gives a partly temporal interpretation of Aristotle's modal statements, in terms of always, never, now and some time. (Compare his account of premisses about what happens for the most part in terms of statistical frequency, in **8(d)** above). But, not carrying the temporalisation right through, he leaves a 'can' in his definitions of contingency (i.e. of a certain kind of possibility), and also uses the idea of holding by nature. The motivations and consequences of this interpretation are discussed in the translation of Alexander *in An. Pr.* by Mueller and by Barnes, Bobzein, Flannery, Ierodiakonou. The equivalences he envisages might be expressed as follows (adaptation from Mueller):

1. 'X holds of Y' is necessary, if and only if X holds of Y always.
2. 'X holds of Y' is actual, if and only if X holds of Y now but not always.
3. 'X holds of Y' is contingent (*endekhomenon*), if and only if X does not hold of Y now, but *can* hold of Y.
4. 'X does not hold of Y' is necessary, if and only if X never holds of Y.
5. 'X does not hold of Y' is actual, if and only if X does not hold of Y now (but does hold at some time).
6. 'X does not hold of Y' is contingent, if and only if X *can* hold of Y and is *capable* of not holding of Y.

As seen in the preceding section, Aristotle, at *An. Pr.* 32a18-21 defines the contingent in the strict sense as what is possible, but not necessary. Alexander at 37,28-38,10; 156,11-22 takes it to be not presently actual either. The same happens here in equivalence 3, but strangely not in equivalence 6.

At *in An. Pr.* 38,23-6, Alexander seems to flirt with the idea of a fully temporal-

ised version of 6, when he says that A's at some time holding of no B is the way in which what is contingent is true. But at 183,34-184,19, speaking of Diodorus Cronus' account of possibility which is fully temporalised, and Philo the dialectician's which is wholly untemporalised, he says that Aristotle's account is intermediate, and gives a non-temporalised account of Aristotle. This is no doubt partly to draw the contrast with Philo, who thinks there is a possibility of chaff at the bottom of the ocean being burnt, so long as it has the capacity to be burnt. Aristotle is said to insist that there should also be no preventing factors like the intervening ocean.

When Aristotle's young associates Eudemus and Theophrastus raise an objection to Aristotle, Alexander seems to concede to them that, if it is contingent that B holds of no A, then at some *time* B holds of no A, and A of no B, *in An. Pr.* 220,12-23. What Alexander does not concede to them is that we can convert (contrary to Aristotle) and infer that it is *contingent* that A holds of no B.

(1) Alexander *in An. Pr.* 26,3-14

If what is said to hold holds always and is taken to hold always, the proposition saying this is a necessary true affirmative; but a necessary negative true proposition is one which takes what by nature never holds of something as never holding of it. But if X does not always hold of Y, if it holds at the present moment, the proposition which indicates this is an actual true affirmative; and similarly a proposition which says that what does not hold does not hold is an actual true negative. But if X does not hold of Y at the present time but can (*dunamenon*) hold of it and is taken in this way – i.e., as being able to hold – the proposition is a true contingent (*endekhomenon*) affirmative; and a proposition which says of what holds or does not hold but can (*hoion*) both hold and not hold that it is contingent that it does not hold is a true contingent negative. IM

(2) Alexander *in An. Pr.* 38,24-6

It has been proved in this case too that its opposite, a contingent universal negative, will be such that at some time it holds of no B (for this is the way in which what is contingent is true). B,B,F,I

(3) Alexander *in An. Pr.* 183,34-184,19

He may also be speaking about possibles and about what is called Diodorean [possibility], namely what either is or will be. For Diodorus posited that only what either is or at all events will be is possible. For, according to him, it is possible for me to be in Corinth if I were in Corinth or at all events were going to be there, but if I were not going to be there, it would not be possible for me to be there either. And it is possible for a child to become literate, if it at all events will be literate. Diodorus propounded his Master Argument in support of this doctrine.

[184,6] Similarly he may be speaking about Philonian possibility. This is what is called simply the suitable (*epitêdeiotês*) for the subject, even if it

has been prevented from coming to be by some external necessity. Accordingly Philo said that it is possible that chaff lying in unmown wheat or in the depth of the sea be burned where it is, even though by necessity it is prevented by its surroundings.

[184,10] What Aristotle says is intermediate between these two. For that which can come to be if it is not prevented is possible (*dunaton*), even if it should not come to be. For it is possible that chaff which is not in the unmown wheat or, in general, not prevented by something from being burnt be burnt even if it never is burnt; and the reason is that it is not prevented [from being burnt]. But it is not possible that the chaff in the unmown wheat be burnt because its burning is prevented by something. Consequently nothing impossible follows if it is hypothesised that the chaff not in the unmown wheat is burnt. But if someone were to hypothesise that the chaff in the unmown wheat is burnt, an impossibility will follow for him, namely that what cannot be affected is affected. ([This is correct] at least if it is hypothesised that the unmown wheat cannot be affected). IM

(4) Alexander *in An. Pr.* 220,12-23

[Objection] If it is contingent that A holds of no B, it is also contingent that B holds of no A. For since it is contingent that A holds of no B, when it is contingent that it holds of none, it is then contingent that A is disjoined from all the things of B. But if this is so, B will then also have been disjoined from A, and, if this is so, it is also contingent that B holds of no A.

[Reply] It seems that Aristotle expresses a better view than they do when he says that a universal negative which is contingent in the way specified does not convert with itself. For if X is disjoined from Y it is not thereby contingently (*endekhomenôs*) disjoined from it. Consequently it is not sufficient to show that when it is contingent that A is disjoined from B, then B is also disjoined from A; in addition [one must show] that B is contingently disjoined from A. But if this is not shown, then it has not been shown that a contingent proposition converts, since what is separated from something by necessity is also disjoined from it, but not contingently. IM

Reading

Aristotle:

Sarah Broadie, *Passage and Possibility*, Oxford 1982, ch. 4.

Jaakko Hintikka, *Time and Necessity*, Oxford 1973.

Lindsay Judson, 'Eternity and necessity in *De Caelo* 1.12', *Oxford Studies in Ancient Philosophy* 1, 1983, 217-55.

Richard Sorabji, *Necessity Cause and Blame*, London & Ithaca, NY 1980, ch. 8 (cf. ch. 4).

Michael White, 'Necessity and unactualised possibilities in Aristotle', *Philosophical Studies* 38, 1980, 287-98.

Alexander:

Jonathan Barnes, Susanne Bobzien, Kevin Flannery, Katerina Ierodiakonou, *Alexander of Aphrodisias: On Aristotle Prior Analytics 1.1-7*, in the *Ancient Commentators on Aristotle* series, London & Ithaca, NY 1991, at n. 57 to 79-80.

Ian Mueller, introduction to *Alexander of Aphrodisias: On Aristotle Prior Analytics 1.8-13* and *1.14-22*, in the *Ancient Commentators on Aristotle* series, London & Ithaca, NY 1999 (2 vols).

R.W. Sharples, 'Alexander of Aphrodisias: problems about possibility I', *Bulletin of the Institute of Classical Studies* 29, 1982, 91-108.

10(c) Do modal relations include the actual, as well as the necessary and contingent?

Some sentences, as already seen are contrasted by Alexander with necessary and contingent ones as being merely actual (*huparkhousa*). But Alexander speaks as if every sentence in Aristotle's syllogistic has a mode (*tropos*), *in An. Pr.* 119,22-8, and Ammonius reports, *in An. Pr.* 215,29-216,29, that most commentators took the sentences of ordinary syllogisms which we describe as non-modal to have a mode after all, namely the actual (*huparkhôn*) mode. On this view 'Socrates walks' is a modal sentence, having the actual, not the necessary or contingent mode. Ammonius disagrees.

(1) Ammonius *in An. Pr.* 215,29-216,1

Now that this is clear, let us next consider whether there is any other *tropos* ... of the same kind [as the modal *tropoi*] which has been introduced by Aristotle into the theory of propositions elsewhere and has been omitted in the work before us. Most of Aristotle's commentators say that there is one, namely the actual (*huparkhousa*) mode, and that it is enumerated in the *Analytics* before necessity and possibility. JB

Reading

Jonathan Barnes, 'Ammonius and adverbs', *Oxford Studies in Ancient Philosophy*, suppl. vol. 1991, 145-63, at 157-61.

10(d) Syllogisms with mixed necessary and actual premisses

One of the central difficulties of Aristotle's modal logic is that at *An. Pr.* 1.9, 30a15-23 he permits a necessary conclusion to be drawn in certain cases when the minor (not the major) premiss is merely actual. To supply an example:

Every human is necessarily rational.
Every animal in this room is human (minor premiss actual).
Every animal in this room is necessarily rational.

This would make good sense, if necessary rationality is being predicated *de re* as a hyphenated predicate of humans. On this interpretation 'necessarily' does not govern the whole sentence in a *de dicto* manner, but only qualifies the rationality. Unfortunately, such an interpretation cannot be applied to some of the other claims Aristotle makes, to get a consistent theory.

Aristotle's younger colleagues, Eudemus and Theophrastus, disagreed with Aristotle (Alexander *in An. Pr.* 124,2-30) offering instead the *ad peiorem* rule which states that the modality of the conclusion must be as weak as that of the weakest premiss. They supply counter-examples to Aristotle of the kind:

It is necessary that all humans are animals.
Everything moving is human.

Yet it is *not* necessary that everything moving is an animal.

It appears that Alexander's teacher, Sosigenes sought to defend Aristotle by saying that 'everything moving is an animal', is *hypothetically* necessary, on the hypothesis, presumably, that everything moving is an animal (or is human), Philoponus from the voice of Ammonius *in An. Pr.* 126,17-29; Ammonius *in An. Pr.* 39,10-25. Alexander disagrees *in An. Pr.* 140,16-141,6.

(1) Alexander *in An. Pr.* 125,2-30

[It is incorrect] to maintain that Aristotle has not here said that the conclusion of mixtures of this kind is [always] necessary, but only when certain material terms are used and that this is confirmed by his having said, 'It sometimes results [that the syllogism is necessary] when just one of the premisses is necessary'. For the word 'sometimes' does not apply to such a mixture as if the conclusion of such a mixture is sometimes necessary and sometimes not; rather the word applies to the mixture generally. For the conclusion of a mixture of a necessary and an actual premiss is necessary sometimes. For it is not always necessary, since he also says that nothing necessary follows if the minor premiss is taken to be necessary [and the major actual]. Thus the word 'sometimes' indicates the character of the mixture and not that with the same character and same combination the conclusion is sometimes necessary and sometimes actual. And he himself indicates this clearly by adding 'not either one of the premisses, but only that which concerns the major extreme term', thereby indicating the point of adding the word 'sometimes'. And it is ridiculous to think that he says 'sometimes' because the conclusion of such a combination is necessary in the case of certain material terms. For on this way [of looking at things] nothing would prevent one from saying that even non-syllogistic combinations are syllogistic 'sometimes'; for they will be found to yield a conclusion in the case of certain material terms. For example, in the second [syllogistic] figure the combination with two universal affirmatives will imply a universal affirmative conclusion, if the extremes are co-extensive with one another and terms of this kind have been taken. For if every human is an animal but also everything that laughs is an animal, it follows that every human is a thing that laughs. But the combination is not syllogistic just because something follows sometimes in the case of certain material terms.

Furthermore if he wanted to indicate this, he would have proved in the case of which material terms it holds. For this would be appropriate for someone who added the word 'sometimes' for this reason. But he does not do this; he carries out his discussion using letters; he gives universal proofs using these because they cannot apply more to these material terms than to those. Consequently one ought to reject this [interpretation] as totally empty. IM

(2) Philoponus *in An. Pr.* 126,17-29

Accordingly, we say that the major premiss has been taken as necessary in the strict sense, but the conclusion has been taken as necessary on a hypothesis, namely 'as long as what is predicated is the case'. For as long as A holds of C, it holds of it by necessity. And Alexander, explicator of Aristotle, says in a certain short work that his teacher Sosigenes is of the same opinion, namely that here Aristotle draws a conclusion which is necessary on a hypothesis. For, he says, that he means this is clear because when the major premiss is actual, the minor premiss necessary, and the conclusion is inferred to be actual, he sets out terms [to show that the conclusion cannot be necessary], but when the major premiss is necessary, the minor actual, and the conclusion is inferred to be necessary, he does not manage to set out terms which imply necessity in the strict sense. Therefore, he says, it is clear that he also takes the necessity to be on a hypothesis. IM

(3) Alexander *in An. Pr.* 140,16-28

He indicates that when he says, in connection with mixtures, that the conclusion is necessary, he means 'necessary without qualification' and not 'necessary on a condition', as some of the interpreters of the subject of mixture of premisses say, thinking that they strengthen his position; they assert that he does not speak about inferring necessity without qualification, but about inferring necessity on a condition. For they say that when animal holds of every human by necessity and – as in the first [syllogistic] figure – human of all that moves or walks, the conclusion is necessary on a condition; for animal holds of all that moves or walks as long as the middle, human, holds of it. For it is not the case that if the minor premiss is necessary, the conclusion is necessary; for it is not the case that if moving holds of every animal and animal of every human by necessity, moving holds of every human by necessity as long as animal holds of every human – for that is false – but for as long as moving holds of every animal. IM

Reading

Aristotle:
Richard Patterson, *Aristotle's Modal Logic: Essence and Entailment in the Organon*, Cambridge 1995.
Commentators:
Kevin Flannery, *Ways into the Logic of Alexander of Aphrodisias*, Leiden 1995.
Ian Mueller, *Alexander of Aphrodisias: On Aristotle's Prior Analytics 1.8-13*, and *1.14-22*, London & Ithaca, NY 1999 (2 vols), Appendix on conditional necessity.

10(e) 'This man has died' – possible because of previous worlds?

Alexander opposes the view of the Stoic Chrysippus that 'this man has died' is impossible, because there would be nothing for 'this' to refer to, if the man were

dead. Chrysippus had propounded this view in opposing the argument given by the dialectician Diodorus Cronus in favour of a deterministic account of possibility as excluding unactualised possibilities. One step in that so-called 'Master Argument' had been that the impossible does not follow the possible. Chrysippus' reply was that 'Dion has died', said in Dion's presence, is (though false) possible, but from it follows 'this man has died', which is impossible.

Alexander replies that on the Stoics' theory of eternal return, 'this man has died', said in Dion's presence, is not impossible, because when Dion returns in the next cycle of the universe, 'this man has died' will be true of him in respect of his death in the previous cycle. The Stoics concede that if with one's hand one makes a series of fists, one can say of a later fist, 'this has been destroyed (earlier)'. It makes no difference whether Dion's soul and body, like the fingers of the fist, are the same in number (though they surely are), so long as Dion is the same.

Inna Kupreeva has pointed out (work in preparation) that Alexander here defends the possibility of 'this man has died' not in terms of the modern possible worlds, but of the Stoic previous actual worlds.

(1) Alexander *in An. Pr.* 180,28-181,19

If they [the Stoics] take 'this man has died' to stand for 'his soul and body have been separated', then on their view 'this man has died' would not be impossible. For that which can at some time become a true predication is not impossible; and on their view, 'his soul and body have separated' (referrring to Dion) can become true on Dion's death. For they think that everything in the world comes about again the same in number after the conflagration, and so too the distinctively qualified individual exists and comes into existence in that world the same as the earlier individual, as Chrysippus says in *On the Cosmos*. But if this is so, Dion too will be again at some time, so that at that time 'this man has died' would become true of him; for his soul and body were separated and were conjoined again. But if this is so, then, on their view, 'this man has died' is not impossible.

[181,3] For they say that the statement 'this has been destroyed' (said of fingers that are closed together and referred to), although false at the time, is not impossible because it is possible that 'this has been destroyed' be true when the fingers are separated (which is the destruction of their being closed together) and again closed together and referred to; for [being closed together] was destroyed earlier when the fingers were separated. So too 'this man has died' will be true of Dion who has come to be again because his soul and body were previously separated (as is also the case with the closing together of the fingers). For, just as in the case of the fingers, the change has only been with respect to number and what is referred to later differs from what is referred to earlier only in number, so too in the case of Dion, at least if the later Dion is the same as the earlier one.

[181,13] But if they were to say that in the case of the fingers the separated and again closed together fingers are the same in number, but that in the case of Dion the conjoined soul and body are not the same in number, this is irrelevant to the argument so long as it is assumed that the later distinctively qualified individual is the same as the earlier one. (The

question how the combination of a soul and a body which are not the same in number could become the same thing is presumably difficult for those who say that the same distinctively qualified individual does come to be). IM

11. Existence of the Subject in Affirmative and Negative Statements

Alexander turns the tables on the Stoics, who denied (**11(c)**) that general terms in the subject position imply the existence of Platonic Forms or other entities. He attacks their view that singular terms in the subject position do imply the subject's existence.

Must the subject of a singular statement exist? If one requires this of the affirmative statement, 'Socrates is wise', then the denial, 'Socrates is not wise', may turn out sometimes to be true precisely because Socrates does *not* exist. This is even more obviously the case with 'Socrates does not exist'. But the problem is not simply one of affirmative and negative statements. Alexander raises questions not only about these overtly negative statements, but also about 'Socrates died', 'Socrates lived', 'Socrates philosophised'. Further, the commentators had to discuss which statements count as affirmative or negative, especially in the case of statements which predicate a so-called 'indefinite' name, like 'not-a-log', or 'indefinite' verb. Is 'Socrates is not-a-log' affirmative or negative?

11(a) Alexander vs. the Stoics on singular statements

How is a singular proposition negated? According to Alexander, Aristotle took the negation of 'Socrates is pale' to be 'Socrates isn't pale'. But Alexander's opponents, presumably certain Stoics, say the negation is 'it is not the case that Socrates is pale'. And they support their case in a way that reminds us of Bertrand Russell, by analysing 'Callias doesn't walk' and 'Callias walks' as both implying, through the subject term, the present existence of Callias. This gives the result, unsuitable for a genuine negation and affirmation, that both could be false together, namely when Callias does not exist. This 'false together' is avoided by their own account of negation, since 'Callias walks' and 'it is not the case that Callias walks' will never be false together, *in An. Pr.* 402,1-33.

The analysis of negation thus turns out to have implications for the analysis of the entire singular proposition. Alexander objects that Aristotle's affirmations and negations do not imply anything about the present existence of the subject, as the Stoics alleged. First, 'the house is being built' can hardly imply that the house already exists. Secondly, if the Stoics were right to analyse 'Socrates isn't alive' as 'there now exists some Socrates who is not alive', they would have to analyse 'Socrates died' as 'there now exists some Socrates who died', 402,26-403,14.

The Stoics reply that they have a different way of analysing 'Socrates died'. It is an inflection of 'Socrates dies' taken as a whole, not split into name and verb, and so, as with their negation, it avoids unwanted implications of present existence, 403,14-8. Cf. Arthur Prior.

Alexander attacks the 'inflection as a whole' claim, 403,18-26, and tries out a different analysis. In 'Socrates died', 'Socrates' has a different meaning. The sentence means: the man who *was*, not who is, Socrates died (see further below on

180,28-181,19). And that is true. Similarly, 'a son will be born' means: someone who will be, not who is, a son will be born, and this also can be true, 403,26-36.

But Alexander also has a more general point to make about the implication of present existence. The name carries no implication of existence at all. Any implications have to be derived from the verb. In 'Socrates lived', 'Socrates died', 'Socrates philosophised', for example, the verb indicates that Socrates existed before, 404,3-10.

(1) Alexander *in An. Pr.* 402,1-8; 12-19; 402,36-403,11; 403,11-404,10

[Alexander *in An. Pr.* 402,1-8 (Stoics? versus Aristotle)] Aristotle says the negation of the affirmation 'Socrates is pale' is 'Socrates isn't pale', not 'Socrates is non-pale'. But there are those who think that even the negation taken this way is not yet a negation. They say one should not put the negative in front of the 'is', nor in front simply of what is predicated, but a negation is what has the negative placed in front of the whole affirmation or proposition. The negation of 'Socrates is pale' is 'it is not the case that Socrates is pale', not 'Socrates isn't pale'. RRKS

[402,12-19 (Stoics?)] They [the Stoic? opponents] support their view by the claim that 'Callias walks' and 'Callias does not walk' can sometimes be false together, whereas negational contradictories are never false together. For they say that if Callias does not exist, then 'Callias does not walk' is no less false than 'Callias walks'. For in both of them what is meant is: There exists some Callias and to him belongs – either walking or not walking. But 'It is not the case that Callias walks' can never itself be false when the affirmation, 'Callias walks', is false. JB

[402,36-403,11 (Alexander)] That their view is false, and that the name in the propositions does not signify that what is named exists, when it is taken without the negative is especially revealed by those affirmations in which something is predicated of what is still coming into being without already being. For it is true to say of a house which is under construction 'The house is being built' and of a mantle still in the process of being created 'The mantle is being woven'. But neither is 'There is some house which is being built', with reference to the house in the process of being built, yet true, nor is 'There is a mantle which is being woven' with reference to the mantle which is in the process of being woven. For, how might what is in the process of being generated be already? For, being for a thing is incompatible with its becoming. Therefore, the name in the affirmations does not signify that it is. If it does not signify that in the affirmations, it does not signify it in the negations, which do not have the negative particle placed before the subject, either. MM

[403,11-14] If 'Socrates is not alive', which we [sc. Aristotelians] call a negation [i.e. the negation of 'Socrates is alive'], is false because it means 'There exists some Socrates who is not alive', then 'Socrates died' will be false for the same reason; for *it* will mean 'There exists some Socrates who died'. JB

[403,14-18 (Stoics?)] They [the Stoic? opponents] are wrong to say that

'Socrates died' has two constructions: in one, it consists of the name 'Socrates' and the verb 'died', and that is indeed false; in the other, it is inflected as a whole from 'Socrates dies' – and then it is true. JB

[403,18-22 (Alexander)] For what is inflected according to time is verbs, whereas what does not signify time is not inflected according to time, and names are like that. So even if something is composed of a name and a verb, this would not strictly be inflected as a whole according to time, since one of the things in the compound is uninflected. RRKS

[403,22-6] Again, if 'Socrates died' were inflected as a whole, it would not be declarative. At any rate, 'Socrates having died' is not a declarative statement because its inflection seems to have become an inflection of the whole. But 'Socrates died' is a declarative statement, because one part stays the same, the name, and only the other is inflected, the verb. RRKS

[403,26-36] 'Socrates' does not mean the same thing in '... dies' and in '... died'; for in 'Socrates dies' it is indicative of the existing Socrates, but in 'Socrates died' it is used by anaphora – for then 'Socrates' means the man who was, not who is, Socrates. And for this reason the proposition 'Socrates died' is true – for the man whom the name 'Socrates' meant died.

Similarly with 'A son will be born to me' (not who is a son but who will be) and 'I will have a house'; for we are not saying that there exists a house which I will have, nor yet is it derived from something.

When the subject term is taken in this way each of the previously mentioned propositions is true. JB

[403,36-404,3] Yet it is not the case that someone who utters the proposition determines in addition, by uttering the name, that when the subject term in the proposition holds in a different way, the proposition which is taken to hold in this way is true. Or rather, if the predicate should fail to belong to some of the subjects, it is this way; if it is clear that it does not exist, it is that way. JB

[404,3-10] For a name, when uttered in its own right, does not itself mean either that it exists or that it does not exist; for what is meant by it neither means in addition that it does not exist nor is in itself indicative of what exists rather than of what existed or what will exist. The name itself is only a sign of the object, and whether the object exists or did exist or will exist is indicated by what is construed with the name. Thus 'Socrates lived' or '... died' or '... philosophised' are all uttered anaphorically, in that what is attached to the name indicates that what is signified by the name existed before. JB.

Reading

J. Barnes, 'Peripatetic negations', *Oxford Studies in Ancient Philosophy* 4, 1986, 201-14.

A.C. Lloyd, 'Definite propositions and the concept of reference', in Jacques Brunschwig, ed., *Les Stoiciens et leur logique*, Paris 1978, 285-95.

Arthur Prior, 'Changes in events and changes in things', *Papers on Time and Tense*, Oxford 1968, ch. 1.

The controversy recurs in 180,28-181,19 in the different context of 'this man has died', already discussed in **10(e)**. Alexander there argues against the Stoic Chrysippus that that different singular statement, involving the demonstrative 'this' said of Dion, should be possible because of Dion's death in a previous cycle of the Stoic universe.

11(b) Other disputes arising from Aristotle

The Neoplatonists did not, like Alexander, have to confront the Stoics, but all commentators had to make sense of Aristotle. And they had to make sense not only of his overt statements, but also of the inferences that he regarded as valid between statements. In some cases, the inferences would only be valid in fact, if the existential import of the statements inferred from each other matched in the right ways. It is perfectly possible that Aristotle himself, or his commentators, might overlook this necessity, and make an overt statement about existential import that required one thing, while endorsing inferences that presupposed another. Here I shall consider overt statements only and refer the reader to the bibliography as regards inferences. A further source of inconsistency could be the fact that in his science and his theory of syllogism, insofar as it is designed for the purposes of science, Aristotle intends to deal with *existing* subjects.

But there is at least an appearance of inconsistency in Aristotle more overt than any of these. For we shall see that in *Int.* 21a25-8, he takes 'Homer is a poet' not to imply the present existence of Homer, because the 'is' is predicated accidentally of Homer. Yet in *Cat.* 13b12-19, he says that if Socrates does not exist, then neither 'Socrates is sick', nor 'Socrates is well' will be true. This seems to entail that these statements *do* imply the existence of the subject, unlike 'Homer is a poet'. Why? In their commentaries on the *Categories* passage Simplicius (*in Cat.* 404,26-35) and Ammonius (*in Cat.* 101,4-13) seem to endorse Aristotle's claim that 'Socrates is well' implies Socrates' existence, without making further comment. Mario Mignucci suggests that Aristotle does not intend to generalise beyond the particular illustrative sentences. 'Homer is a poet' obviously does not imply the subject's present existence. 'Socrates is well' obviously does; it implies his existence presumably through something other than the verb 'is', since *Int.* 16b19-25 tells us that that is nothing itself, but merely signifies a combination, as Alexander (*in An. Pr.* 16,7-15) and Ammonius (*in Int.* 14,27-31; 160,10-14; 165,12-15) repeat. I shall start with these various kinds of affirmation.

(i) Affirmations

(1) Aristotle *On Interpretation* 21a25-8

Thus Homer is something, for example a poet. Is it then also the case that he is? Rather, it is not, for 'is' is predicated accidentally (*kata sumbebêkos*) of Homer. 'Is' is predicated of Homer because he is a poet and not in its own right. RRKS

(2) Aristotle *Cat.* 13b12-19

All the same, it might especially be thought that something of the kind happens in the case of contraries said with combination. Thus Socrates' being well is contrary to Socrates' being ill. But not even in the case of these

is it always necessary for one to be true and one false. For if Socrates exists, one will be true and the other false, but if he does not exist, both will be false. For if Socrates himself does not exist at all, neither Socrates' being ill nor his being well will be true. RRKS

Ammonius endorses Aristotle's point that 'Homer is a poet' does not imply his existence at *in Int.* 184,20-2; 211,31-212,6. By 'accidentally', as Boethius says, *in Int.*^{2} 374,14-27 Meiser, Aristotle seems to mean that 'is' applies only because of his being a poet, and not because of his being Homer. Ammonius and Boethius infer that the 'is' would no longer be applicable, if 'poet' were not applicable, Ammonius *in Int.* 212,2-4; Boethius *in Int.*^{2} 374,14-27 Meiser.

Boethius, *in Int.*^{2} 375,23-376,15 Meiser, takes Aristotle to mean by 'accidental' that we can apply 'is' to the dead Homer because he *is* the subject matter of opinions. This is close to what Ammonius is quoted below as saying, at *in Int.* 184,25-31 about 'goat stag is not-just'.

(3) Boethius *in Int.*^{2} 375,23-376,5

But because there have been some who said of the very thing which is not that it *is*, and added an entire syllogism to these propositions ('What is not *is* a subject of opinion, what *is* a subject of opinion *is*. Therefore what is not *is*'), consequently [Aristotle] spoke as follows. If, he says, it is right to predicate 'is' of what is not, because it *is* a subject of opinion, we do indeed predicate the verb 'is' of subjects of opinion, but only accidentally of that which is not. For since what is not is a subject of opinion, we predicate the verb 'is' for that reason in the second place of that which is not. RRKS

We have seen in **11(a)** above that Alexander also recognises that 'The house is being built', 'Socrates is dead', 'Socrates lived', 'Socrates philosophised' do not imply the present existence of the subject.

Alexander is well aware, however, that these are special cases. And he cites Aristotle's pupil, Eudemus, as treating the 'is' in 'Socrates is white' as not merely conjoining, but making in *some* sense a genuine predication. Did Eudemus think that Socrates is implied to exist, and, moreover, that the implication is carried by 'is'?

(4) Alexander *in An. Pr.* 16,15-17

Or is it absurd to claim that the 'is' in these propositions is not predicated in any sense? Eudemus, in the first book of his *On Expression*, shows this at some length. RRKS

In the following, Ammonius and Simplicius seem to endorse Aristotle's idea at *Cat.* 13b12-19 that 'Socrates is well' implies the existence of Socrates.

(5) Ammonius *in Cat.* 101,4-13

Aristotle raises an objection, saying that in the case of contraries not said

without combination it would seem that one is true and the other false, whereas this is not the case. He resolves this by [the method of] objection and counter-objection. [He says] that, first of all they do not always (*pantôs*) divide [into] the true and the false. For if someone should say 'Socrates is well' [and] 'Socrates is ill', then if Socrates exists (*huparkhei*), they divide, but if he does not exist, the one which says that a nonexistent person is well and the one which says that he is ill are both false. On the other hand, if they do divide [into true and false], then they are in effect affirmation and negation; for that is what a statement (*legomenon*) signifies. For we know that of opposites in language (*en logois*), affirmation and negation are opposed in this way. Therefore, [contraries said in combination] do not always divide [into the true and the false, i.e. they do not do] precisely what is distinctive of affirmation and negation. MC & GMat

(6) Simplicius *in Cat.* 404,26-35

But even if one should agree that these *are* contraries, it is still not necessary that one of them be true and the other false: 'for although if Socrates exists one [statement] will be true and the other false, if he does not exist both will be false' (13b16-18). For someone who does not exist could not correctly be said to be either sick or in health. But a contradictory pair *always* partitions the true and the false, whether Socrates exists or not. For of the *non*-existent [Socrates] the negation 'It is not the case that Socrates is well' is true as well as 'It is not the case that Socrates is sick'. For not being sick is not the same thing as being well, just as it is not the case, either, that not seeing is the same thing as being blind. For it is clearly true to say in the case of a wall that 'It is not the case that it is healthy and nor is it the case that it sees', but false [to say of it] 'It is sick and blind'. RG

Before turning to simple denials, it is necessary to discuss the trickier case of the predication of '*indefinite*' names and verbs.

(ii) Predication of indefinite names and verbs

(7) Aristotle *On Interpretation* 16a29-32

'Not-man' is not a name. In fact, there is not even a name one should call it, for it is neither a sentence nor a negation. But let it be an '*indefinite name*' because [phrase imported from line b15] it applies equally to either, both what is and what is not. DB

(8) Aristotle *On Interpretation* 16b11-15

But 'is-not-healthy' and 'is-not-ill' I do not call verbs. For they additionally signify time and always belong to something, but there is no name for their differentia [from verbs]. Let this be an '*indefinite verb*', since it belongs to anything in the same way, whether existing or not existing. DB

Ammonius comments on these passages at *in Int.* 41,16-42,24 and 51,25-52,16. He explains that 'not-man' is called indefinite because it signifies everything other than man. He comments that it is impossible for something to *belong* to what is not, so Aristotle must mean something weaker, that these indefinite verbs can be *truly predicated* of what is not. With that qualification, he endorses Aristotle's acceptance of non-existent subjects. We can say 'The hippocentaur does-not-thrive' (*oukh hugiainei*), 'The hippocentaur does-not-ail' (*ou kamnei*), 'The goat-stag (or hippocentaur) is not-man'.

At 162,23-5 Ammonius introduces a qualification. Only a man can be a not-just-man. Philoponus agrees (*in An. Pr.* 372,9-11; 15-16) that only a log can be a not-white-log.

At 183,17-23 Ammonius confronts an objection that you cannot say that a goat-stag is not-just. He replies first at 184,20-2 by borrowing the remark discussed above that Aristotle makes at *Int.* 21a25-8 about 'Homer is a poet', that the 'is' is predicated only accidentally in 'every goat-stag is not-just', and so does not imply the existence of goat-stags. At 184,25-31 he answers the puzzle as to *where* (*pou*) the goat-stag is which he declares to be not-just. He answers that it is the goat-stag in our thoughts, and invokes the 'Eleatic Stranger' of Plato's *Sophist*, to claim that what is in our thoughts cannot be altogether non-existent (*mêdamôs on*).

(9) Ammonius *in Int.* 184,25-31

If someone asks, 'where is the goat-stag to which it is right for us to say that "not-just" belongs?', we shall say that it is the goat-stag in our thoughts (*epinooumenos par' hêmon*). It will be right for us to predicate of it opinions and names, even definite ones. For what is altogether non-existent (*mêdamôs on*) is not a subject of either opinions or names, and admits no other predication, since it cannot be spoken of as a unity or as any other number of things, as the Eleatic Stranger [Plato *Sophist* 238B] determined. RRKS

Boethius agrees with Ammonius, but Philoponus does not. Thus Boethius says at *in Int.*[2] 62,8, and 70,9 and *in Int.*[1] 60,11 Meiser, that one can say 'Sylla is not-man', 'Sylla not-runs', 'Chimaera not-runs'.

Philoponus disagrees at *in An. Pr.* 376,23-5. He there denies that you can say 'not-white' of the non-existent. It may be relevant that he is discussing a different work, not Aristotle's *On Interpretation*, but his *Prior Analytics*, and the discussion there at 1.46 of indefinite names.

(iii) Simple denials

Simple denials are simple in contrast with the predication of indefinite names and verbs, like 'not-white', 'not-runs'.

Ammonius allows that the subject of a simple denial need not be existent, as in saying of a non-existent, 'it isn't just man', *in Int.* 162,34-5, or saying 'A goat-stag isn't just', 184,7-14.

This time, Philoponus agrees, *in An. Pr.* 370,6-7; 372,10; 372,14-15; 376,23-4. You can say that a non-existent isn't white, or isn't a white log.

But Ammonius needs to be careful when allowing a 'goat-stag isn't just', not also to allow 'a goat-stag isn't an animal'. For if non-existence of the subject justifies

every denial, something will follow about every affirmation. Every affirmation will imply the existence of the subject, contrary to what Ammonius says about 'Homer is a poet'.

The truth of sentences about fictitious subjects like Daedalus and Medea is discussed by Augustine *Soliliquies* 2.11.20; 2.15.29.

Reading

Allan Bäck, *Aristotle's Theory of Predication*, Leiden 2000, ch. 9.

Manuel Correia, 'Boethius on syllogisms with negative premisses', *Ancient Philosophy* 21, 2001, 161-74.

Robin Lane Fox, 'Augustine's *Soliloquies* and the historian', Proceedings of the Fourteenth International Conference on Patristic Studies, Oxford 2003, *Studia Patristica*, in preparation.

Mario Mignucci, 'Aristotle on the existential import of propositions,' in preparation.

11(c) General terms, Stoics and Neoplatonists

The Stoic Chrysippus, we are told in Sextus *Math.* 11.11, introduced a special analysis of statements about general terms. 'Man is a rational animal' is analysed as 'if anything is a man, it is a rational animal'. The appearance that 'Man' refers to something existent, e.g. a Platonic Form, is cancelled out by transferring the term to the predicate position and insulating it with an 'if'. The strategy is explained in *Math.* 11.8, and there ascribed to the writers of handbooks. Thus Chrysippus' strategy is the opposite of that which the Stoics used for singular subject terms, which in **11(a)** they took to imply existence, while Alexander attacked them.

Victor Caston conjectures that this strategy would have been what Chrysippus used to defuse the 'No one' puzzles, recorded by Simplicius *in Cat.* 105,7-29; David [Elias in Busse, *CAG*] *in Cat.* 178,1-13 and pseudo-Philoponus *in Cat.* in the apparatus criticus to Philoponus *in Cat.* 72,4. The Elias and pseudo-Philoponus are virtually identical. Homer's Odysseus gave his name as 'No one' to the giant Cyclops, so that when the Cyclops was asked who was attacking him, he shouted, 'No one', thus forfeiting assistance from his fellows. The present puzzle is thought also to turn on a misunderstanding of pronouns like 'Someone'. It concerns the question whether Man is in both Athens and in Megara. Chrysippus does not have to address this issue, because for him any statement about the general term Man has to be reconstrued as being about what would be true of an individual someone, if that someone was in Megara, and there is no doubt that the individual would not in that case be in Athens. But the Platonists take general terms to stand for Forms, and do not reconstrue them as referring to ordinary individuals. Moreover, they treat Man as if it were a someone, a special individual. They are asked whether, if Man is in Athens, he is then not in Megara. In Plato's *Parmenides* 131B Plato represents Socrates as embarrassed at the idea that a Form like Large might as a whole be present to each large individual, in the way that a sail cloth spread overhead, or the daylight, might be thought to be present as a whole over each individual. But the Neoplatonist commentators, rather than allow that Man is not in Megara, seem to accept that Man as a whole is present in both Megara and Athens, even though that could not be true of an individual man.

(1) Sextus *Math.* 11.8

The handbook writers (*tekhnographoi* [but Chrysippus is credited at 11.11])

say that the definition (*horos*) differs from the universal generalisation (*katholikon*) only in mere syntax and is the same in force. And that is plausible, for one who says, 'Man is a mortal, rational animal' says something the same in force, though different in vocal expression, as one who says, 'if anything is a man, it is a mortal, rational animal'. RRKS

(2) Simplicius *in Cat.* 105,7-20

It is worth inquiring whether the Forms will be said to exist as they are said to by those who grant reality and creative power to them. For Chrysippus himself puzzles about whether Form will be called individual (*tode ti*). With this we must also take the conventional approach of the Stoics to generically qualified things – in what way 'cases' are put forward by them, and in what way common features (*ta koina*) are called 'nothings' by them, and in what way there arises, because of ignorance that not all substance signifies an individual (*tode ti*), the sophism due to No one, because of the form of expression. Thus:

If someone (*tis*) is in Athens, he is not in Megara
<lacuna>

For Man is not someone (*tis*), since the common [man] is not someone, but in the argument we were taking him as someone. And it is because of this that the No one argument actually got this name.

It is the same also with the following sophism:
What I am you are not
I am a man
So you are not a man

For with this sophism 'I' and 'you' are said of individuals (*atoma*), but 'man' is said of no particular. The false inference is drawn because 'No one' was used like 'someone'. RRKS

(3) pseudo-Philoponus *in Cat.* from cod. Marc. 217, in apparatus criticus to Philoponus *in Cat.* 72,4 (virtually = David [Elias in Busse, *CAG*] *in Cat.* 178,1-12)

[Commenting on Aristotle *Cat.* 5, 3b10, 'Every substance is thought to signify an individual'.] The No one paralogisms arise because of ignorance of the fact that not all substance signifies this individual (*tode ti*), as with Homer's Odysseus opportunely calling himself 'No one'. Here is an example of a No one paralogism:

If someone (*tis*) is in Athens, he is not in Megara
Man is in Athens
So man is not in Megara

For man [here] is a this, but it does not [in fact] signify a something (*ti*). Similar to this is:

I am; you are not

For as 'someone' indicated an individual (*atomos*) substance, so does 'I'. So

the paralogism resides in 'someone'. For one person forces the 'if someone' to be universal, which is false. Another takes it as applying to the particular, and then the proposition is true. For a given (*tis*) man, say Socrates or some other particular man, who is in Athens is not in Megara, so as not to be torn asunder from himself. So one should put it thus:

Someone who (*hostis*) is in Athens is not in Megara
Socrates is in Athens
So Socrates is not in Megara. RRKS

Reading

Victor Caston, 'Something and nothing: the Stoics on concepts and universals', *Oxford Studies in Ancient Philosophy*, 17, 1999, 145-213.
M. Frede, *Stoische Logik*, Göttingen 1974, 56-8.
Jaap Mansfeld, 'Versions of the nobody', *Mnemosyne* 37, 1984, 445-7.

12. Philosophy of Mathematics

12(a) Alexander: mathematical objects abstracted, not substantial as in Plato

The Aristotelian Alexander holds that the objects of mathematics exist not independently, but through thought (*epinoia*) which abstracts from enmattered things the matter which makes them subject to change, thus leaving behind mathematical objects. Plato's view of mathematical objects as eternal substances is rejected.

Alexander does not say, like many modern commentators on Aristotle, that the objects of mathematics exist *in* thought, but that they exist *by* thought, and subsist *in* sensibles. In other words, our mental process of abstraction operates on the sensibles in which they subsist and leaves them located there. One might compare how the equator, or the boundary of a country is created by the mind, but located on the surface of the earth. Alexander would not, however, deny Aristotle's view that the forms which we think, both mathematical and non-mathematical, have an internal location as well. For they are located within sensible forms which in perception we receive, Aristotle *On the Soul* 3.8, 432a4-6, and we think them within images (*phantasmata*), *On the Soul* 3.7, 431b2, so that the intellect is the place of these forms, in which it receives them, *On the Soul* 3.4, 429a15; a27.

(1) Alexander *in Metaph.* 52,13-21

For according to him [Plato] they [mathematical objects] were between [Ideas and sensibles] because they differ from sensible things in that they are eternal and utterly unchangeable, and from the Ideas inasmuch as the Ideas are something numerically one. But mathematical objects reveal their likeness [to one another] in the many things, i.e. in sensible particulars, existing as they do in (*enuparkhein*) these. For these mathematical objects do not subsist (*huphestanai*) independently, but by thought (*epinoiai*); for after the matter and the motion have been separated (*khôrizesthai*) from enmattered things, the things according to which and with (*kata, meta*) which mathematical objects have their subsistence, these objects are left, revealing that likeness [to one another they possess] in enmattered things that are both many and different according to their accidental material attributes. Or this may indeed be the truth of the matter, but Plato certainly did not speak in this way, seeing that he made these objects natures and independent and eternal substances. WED

Two commentators, Ammonius and Philoponus, appear to accept the Aristotelian doctrine of abstraction. Other Neoplatonists, we shall see in the next section, reject abstraction.

(2) Ammonius *in Isag.* 11,31-12,6

For a circle or a square and such things cannot exist by themselves separate from some matter, and therefore they are inseparable from matter, but when we see a wooden or copper or stone circle, we get an impression of the form of the circle itself in our mind (*dianoia*), and we maintain such impressions by themselves apart from matter (just as wax receives the impression of a signet ring without also receiving any of the matter); and therefore it is separable from the matter in the sense that it is separated in thought (*epinoia*). IM

(3) Philoponus *in DA* 57,28-58,4

The mathematician also deals with forms which are inseparable from matter, not with all, but only with those that can be separated by thought (*epinoia*). These are the so-called common sensibles, such as magnitudes and figures. For it is not possible to separate the form of flesh or bone and things of this kind from matter even in thought. For if one has conceived softness and fluidity and ruddiness and whatever else gives form to flesh, one will have also simultaneously conceived the appropriate matter, so that if one abstracts the matter, one also abstracts these things. Therefore, the mathematician gives definitions of the *per se* (essential) forms capable of abstraction; without taking matter into account, he gives these definitions in and of themselves. Consequently in a definition he does not mention the cause either. For if he defined the cause, he would certainly also have taken the matter into account. Since, then, he doesn't discuss matter, he doesn't mention the cause either. For example: what is a triangle? A figure contained by three straight lines. In these definitions matter is not mentioned and therefore neither is a cause through which this form is in this matter. IM

Reading

Kevin Flannery, 'Mathematical entities in the commentary on the *Metaphysics* attributed to Alexander of Aphrodisias', in V. Celluprica, ed., *Acts of Congress on Aristotle Metaphysics* III, Naples 2002.

Ian Mueller, 'Aristotle's doctrine of abstraction in the commentators', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, ch. 20.

12(b) Neoplatonist geometrical figures projected from thought into imagination

Although we have just seen that some Neoplatonists follow the Aristotelian Alexander and accept Aristotelian abstraction, the rival Platonic view of recollected concepts being projected into the imagination and studied there is distinguished from abstraction by 'Simplicius' *in DA* 233,7-19; 277,1-6; 277,30-278,6, translated below. It is treated as preferable to abstraction by Syrianus *in Metaph.* 12,28-13,3; 95,13-17 and 29-36; Proclus *in Eucl. 1* 12,9-13,27, translated below, and by Sim-

plicius and Olympiodorus at **5(c)**(12), (13) above. Cf. Procl. at **9(b)**(1) and his *in Parm.* more generally.

Platonic concepts can, because of their accuracy, be used to correct the inexact Aristotelian form residing in sensibles, according to Porphyry *On Ptolemy's Harmonics* 14,32-15,6, Olympiodorus *On Phaedo* Lecture 12.1, lines 9-25, translated in **5(c)**(13) above, and Syrianus *in Metaph.* 95,29-36; Proclus *in Eucl. 1* 12,9-13,27, translated below.

Platonic concepts are spread out, when projected (*proballein*) from the mind into the imagination, where they are exhibited as geometrical figures. The geometrical figures in the imagination are said by Syrianus, *in Metaph.* 91,29-34, to be parasitic (*paruphistasthai*) on the concepts in the mind (cf. on parasitic **Physics 4(e)**). Geometers, in his view, would prefer to study the undivided concepts themselves, but through weakness are forced to study the concepts in their images. The point is further developed by 'Simplicius' *in DA* 233,7-19 and in Proclus *in Eucl. 1* 54,14-55,13 below: the geometer, says Proclus, theorises about the concepts in the mind, but makes his proofs about the circles in imagination.

Proclus *in Eucl. 1* treats the projection like projection in a modern cinema. He compares the screen of imagination with a mirror, 121,2-7; 141,2-19, translated below, and he contrasts the indivisible concepts in the projector with the extended representations on the screen, 53,18-55,13, translated in **5(c)**(18) above and partly below.

The projected geometrical figures are described as universals, but as 'distributed' (*katatetagmena*) universals, i.e. as occurring in instances, by Proclus *in Eucl. 1* 54,22-55,13, translated below. But we learn that universals can be distributed among perceptible instances, the more familiar case, or, as here, in the imagination. Normally the imagination is thought of as entertaining particulars, but here we have universals in the imagination, Proclus *in Eucl. 1* 51,13-20; 53,18-55,13, translated in **5(c)**(15) and (16) above, the last partly translated below.

Projection of concepts is required also for linguistic understanding, as described in **7(h)** above, and for perceptual recognition, for imagining, for memory, for recollection, for bringing something to consciousness and for projecting scientific distinctions, as illustrated in **Psychology 1(b)**, **2(f)**, **3(c)** and **3(f)**.

Although I am speaking of Platonic *concepts*, the word normally used for them in the following passages and in some passages in **5(c) Universals,** *Seven kinds*, is *logoi*, which is more literally rendered '[rational] principles', since it is sometimes compared with [rational] principles in nature which are not concepts, and is sometimes contrasted with Aristotelian *epinoiai*, which are concepts. But, as explained in **5(c)**, the theory is more intelligible if the reader is reminded that in this context the Platonic principles are treated as concepts, so except in the tricky passages mentioned, where I shall indicate both ways of translating, I shall use the translation 'concepts', but indicate at least the first occurrence in each passage by also transliterating *logoi*.

'Simplicius' *in DA* 233,12 and 277,1-6, translated below as (11) and (12), ascribes the theory of projection in mathematics to the Pythagoreans. So although Porphyry already uses the term, as quoted in **Psychology 2(f)** narrative and in **2(h)**(1), so it may have been introduced into geometry by Iamblichus, who sought to integrate Pythagorean philosophy with Platonic. Syrianus (at (1) below) ascribes to Plato the simpler idea that the objects of Geometry reside in the imagination, which is all that is claimed in the first two passages cited below.

By locating geometrical objects in imagination, these Neoplatonists go beyond Alexander in an additional way. For Alexander, we saw in **12(a)**, made them thought-dependent, but not exclusively mentally *located*.

(1) Syrianus *in Metaph.* 186,17-19

We would not be speaking off the mark about the divine Plato if we said that he made our imagination the place for mathematical solids, just as matter is for enmattered forms. IM

(2) Syrianus *in Metaph.* 50,6-7

Yet [points and lines] are also in the mathematical solid, which, even if it is not perceptible, is in the imagination (*phantaston*). RRKS

(3) Syrianus *in Metaph.* 12,28-13,3

Therefore, by saying that there are many ways in which these things [numbers, lines, figures, points] *are*, we bring to light both their being and their substantiality. For even in the sensible works of nature one could see figure, number, physical surface and its limits; in addition, these things are established also in our imagination and opinion, either being grasped by means of abstraction from the sensibles, as he [Aristotle] prefers, or in our judgement being perfected by the substantial forms of the soul. Thus these things in imagination and opinion (*phantasta, doxasta*) participate in being, but are not substances; that is why they might also fall under quantity rather than quality or any other category; but the substantial concepts (*ousiôdeis logoi*) of soul which contain these things are already substances. But if someone might also see their models in intellect and in the intelligibles, one could view number, figures and magnitude itself as counted amongst the very first substances. GBe

(4) Syrianus *in Metaph.* 91,29-34

But you must say that [geometry] deals with things in the imagination (*phantasta*) insofar as they are parasitic on (*paruphistasthai*) the substantial concepts (*logoi*) of the mind (*dianoia*), which also provide the cause of demonstration, or rather that geometry wants to contemplate the partless concepts of the soul themselves, but is too weak to use thoughts (*noêseis*) not involving imagination and so spreads out (*ekteinei*) the concepts into extended figures and magnitudes in the imagination (*phantasta*), and thus studies the concept in *them*. IM

(5) Syrianus *in Metaph.* 95,13-17

But one might wonder at Aristotle who even in these cases of succession puts the universals on the same level as the mathematicals; for as the universals are, so the mathematicals are, too. In reality both are in the substantial formal principles (*logoi* [concepts]) of the soul but according to

him they are in the sensibles and in the concepts (*epinoiai*) which abstract the common natures (*koinotêtes*) from the sensibles. RRKS

(6) Syrianus *in Metaph.* 95,29-38

Generally one should bring against his [Aristotle's] whole theory, both (1) that we have not seen among the sensibles every geometrical shape or every number that the mathematical sciences deal with, and (2) that it is impossible to employ such precision on what is grasped from sensibles. If it is claimed that we supplement what is lacking in them and make them more precise and consider them in that condition, it is necessary to state first where the capability to perfect them comes from. We cannot find another more truthful explanation than the one stated by the ancients, viz. that in virtue of its essence the soul has preconceived (*prolambanein*) the concepts (*logoi*) of everything.

Moreover, if we add something to abstractions from sensibles, we shall end up making them not more precise and truthful but rather more fictitious. FDH

(7) Proclus *in Eucl. 1* 12,9-13,27

In the first place, if we say that mathematical forms (*eidê*) are derived from sense objects – that the soul, from seeing material circles and triangles, shapes in herself the later-generated (*husterogenôs*) form of circle and the form of triangle – whence come the exactness (*akribeia*: precision) and certainty that belong to our concepts (*logoi*)? Necessarily either from sense objects or from the soul. But they cannot come from sense objects, for then there would be far more precision in sense objects than there is. They come therefore from the soul, which adds perfection to the imperfect sensibles and accuracy to their impreciseness. For where among sensible things do we find anything that is without parts, or without breadth, or without depth? Where do we see the equality of the lines from centre to circumference? Where the fixed ratios (*logoi*) of the sides? Where the rightness of angles? Do we not see that all sensible things are confused with one another and that no quality in them is pure and free of its opposite, but that all are divisible and extended and changing? How, then, shall we get the stable substance which unchangeable principles have, if they are derived from things that are ever changing from one state to another? For it is admitted that anything which results from changing beings receives from them a changeable character. And how can we get the exactness of precise and irrefutable forms (*eidê*) from things that are not precise? For whatever yields knowledge that is steadfast has that quality itself in greater degree.

[13,7] We must therefore posit the soul as the generatrix of mathematical forms and concepts. And if we say that the soul produces them by having their patterns (*paradeigmata*) in her own essence and that these offspring are the projections (*probolai*) of forms previously existing in her,

we shall be in agreement with Plato and shall have found the truth with regard to mathematical being. If, on the other hand, she weaves this enormous immaterial fabric and gives birth to such an imposing science without knowing or having preconceived (*proeilêphuia*) these concepts (*logoi*), how can she judge whether the offspring she bears are fertile or wind eggs [Plato *Theaetetus* 151E; 157D], whether they are not phantoms instead of truth? What canons could she use for measuring the truth in them? And how could she even produce such a varied mass of ideas without having their essence (*ousia*) in herself? For thus we should be making their being (*hupostasis*) come about by chance, without reference to any standard. If, therefore, mathematical forms (*eidê*) are products of the soul and the concepts of the things that the soul produces are not derived from sense objects, mathematicals are their projections (*proballesthai*), and the soul's travail and her offspring are manifestations of eternal forms (*eidê*) abiding in her. GM

(8) Proclus *in Eucl. 1* 54,14-55,13

So when geometry says something about a circle and its diameter and its properties, for example, about tangencies and divisions of such things, let us say neither that its teaching is about perceptible circles – since it undertakes to make a separation from perceptible things – nor that it is about the form in the mind (*en dianoiai eidos*). For the circle is one, but geometry makes statements about many circles; it projects (*proballein*) each of these circles with respect to one circle and studies the same things in all of them. That one circle is indivisible, but the circle in geometry is divisible. We must grant the geometer that he is investigating the universal, but this is the universal which is distributed (*katatetagmenon*) in circles in the imagination (*phantastoi*). He sees one circle, he theorises with respect to another, the circle in the mind, and he makes his proofs about a different one. For the mind has the principles (*logoi*, here *concepts*), but, being too weak to see them in a folded way, it unfolds and develops them and leads them into the imagination (*phantasia*), which lies in the entryway [of the mind], and it unrolls its knowledge of them in imagination or with imagination, enjoying its separation from perceptible things, and finding matter in imagination (*phantastê hulê*) well prepared for receiving its own forms. So the insight of geometry involves imagination, the combining and dividing of figures occur in imagination (*phantastai*), and its knowledge (*gnôsis*) is a path to the intellegible substance (*dianoêtikê ousia*), but it has not yet reached those heights, since the mind looks outside itself, and, although it studies these things with respect to what is inside itself and makes use of projections (*probolai*) of its principles (*logoi*, here *concepts*), it moves from itself into what is outside it. IM

(9) Proclus *in Eucl. 1*, 121,2-7

And thus we must think of the plane as projected (*proballesthai*) and lying

before our eyes, and the mind (*dianoia*) as writing everything upon it, the imagination becoming something like a plane mirror to which the concepts (*logoi*) of the mind send down reflections (*emphaseis*) of themselves. GM

(10) Proclus *in Eucl. 1*, 141,2-19

Therefore just as nature stands creatively above the visible figures, so the soul, exercising her capacity to know, projects (*proballein*) on the imagination (*phantasia*), as on a mirror, the principles (*logoi*) of the figures, and the imagination, receiving the figures in the form of images (*eidôla*) and containing reflections (*emphaseis*) of what is within the soul, by their means affords the soul an opportunity to turn inward from the images and attend to herself (*eis to eisô strophê kai pros heautên energeia*). It is as if a man looking at himself in a mirror and marvelling at the power of nature and at his own appearance (*morphê*) should wish to look upon his actual self (*heauton*) and possess such a power as would enable him to become at the same time the seer and the object seen. In the same way, when the soul is looking outside herself at the imagination, seeing the figures depicted there and being struck (*ekplagênai*) by their beauty and orderedness, she is adoring her own concepts from which they are derived; and though she adores their beauty, she dismisses it as something imaged and seeks her own beauty and wants to go past it to the inside. GM

(11) 'Simplicius' *in DA* 233,7-19

It is his [Aristotle's] practice to think and say that the objects of mathematics exist in abstraction, not, like the Pythagoreans, looking for the concepts (*logoi*) which project (*problêtikoi*) the mathematical impressions that are in the imagination, which are substantial in the life of the soul that relates to the body, but rather saying that the mathematical entities are in the imagination's impressions themselves, to which [impressions] in truth mathematicians devote their whole activity. The Pythagoreans, attending to the vital concepts that project the impressions, made mathematical objects substances, while Aristotle denies the substantiality of the impressions and says they arise from abstraction, since the soul receives them in accordance with an imitation in respect of sensible objects. It is not because the soul does not project these too by its own activity. That is shown by their turning one to truth and precision, for the perceived shape is not truly cubic, nor is the physical straight line truly breadthless: only the mathematical one is. HJB

(12) 'Simplicius' *in DA* 277,1-6 and 277,30-278,6

By mathematics I now mean not that of the Pythagoreans which oversees the vital concepts (*logoi*) that project (*problêtikoi*) extensions and shapes, whether they occur in natural bodies or in imagination – *that* is philosophy

– but all the mathematics that revolves round the projected things themselves, shapes for example, and magnitudes and motions, which Aristotle used to call abstracted entities (*ex aphaireseôs*). ...

[30] It has, then, been stated what the abstracted entities are, namely mathematicals, meaning not the causes, nor those that exist as substances, but those spread in front of us (*proteinomena*) which are accidental characteristics. The reason for their name is that they are studied not as they are – with their substance – but without it, by those whom most people ordinarily call mathematicians. Since these objects of perception and imagination are accidental characteristics, perception and imagination are ways of knowing them that are coordinate, since perception and imagination judge accidental characteristics, not substances. It is reason and intellect that grasp substance. Plato says [*Theaetetus* 186C] that perception fails to hit substance, which is in any case obvious, because all perceptions concern qualities, quantities and effects (*pathê*). Thus, the imprints (*tupoi*) produced in imagination by objects of perception are also not substances.

[40] Things of that kind are not only studied, as has been said, by coordinate kinds of knowledge, but also by our intellect, which is sometimes involved with perception and imagination and is active about those things only, without knowing the substances themselves. One might call that intellect mathematical by reference to the person ordinarily called a mathematician by most people. [But one might call mathematical] the stronger intellect which grasps substances, which at other times looks not at those other things, but at their causes, which are substances, both forms and compounds, and which takes the accidental characteristics as effects derived from these as causes. RRKS

Reading

Ian Mueller, 'Aristotle's doctrine of abstraction in the commentators', in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990, ch. 20.

12(c) Neoplatonists on objects of arithmetic residing in thought

Arithmetic is different from Geometry. Mathematical number and the units which make it up reside in opinion (*doxa*), unlike the geometrical point which resides in imagination. Opinion is here given an elevated role, just as it is in Physics, because Plato in the *Timaeus* made the sensible world an object of opinion. See Proclus *in Tim.* 1.223,16-30, translated in **Psychology 3(c)**. For reference already in Syrianus to mathematical objects in opinion as well as in imagination, see *in Metaph.* 12,33-4, translated in **12(b)**. The reference to opinion in Syrianus is explained below by Proclus *in Eucl. 1* 95,21-96,11.

(1) Proclus *in Eucl. 1* 95,21-96,11

Since the Pythagoreans define the point as a unit which also has position, we should investigate what they have in mind when they say this. That

numbers are more immaterial and purer than magnitudes and that the beginning of number is simpler than that of magnitudes is clear to everyone. But when they speak of the unit as having position I think they are indicating that the unit and number – that is monadic number – have their existence (*hupostasis*) in opinion (*en doxêi*); and that is why for each soul each number, such as five or seven, is one and not many, and free of any adventitious figure or form. But the point is put forward (*proteinesthai*) in imagination and has come to be as in a place and embodied in intelligible matter. Hence, the unit is without position, since it is immaterial and outside all extension and place; but the point has position because it appears in the bosom of imagination and is enmattered. IM

Euclid had defined mathematical number as a multiplicity of units, *Elements* 7, def. 2. But as Mueller points out, Syrianus makes these units merely the *matter* or *substratum* of number, on which we have to impose, as form, the triad, pentad, heptad, ennead, etc., that we carry in our souls (133,10-12). Only so can the units compose three, five, seven, or nine. There is only one triad, just as we nowadays think there is only one number three. In an ennead, there are not three triads, but the one triad taken three times (134,5-20; 135,16-136,17). Addition, division and multiplication apply to the substratum only (133,4-15; 134,5-20). This answers some of the problems that Socrates expressed about addition and division in *Phaedo* 96E6-97B3, before resorting to the theory of Forms as a solution. Because the triad, etc., are innate in our souls, arithmetical knowledge is innate in all humans (133,14).

The triad or pentad in our soul is itself a unit which owes its unity to having proceeded in its turn from a still higher unit (132,8-14; 135,16-32).

(2) Syrianus *in Metaph.* 133,4-22

Never mind that when we add three to four and make seven we speak this way: what we say is not true. For the units combined with the units make the *substratum* for the number seven, but seven comes to be from so and so many units and the heptad [i.e. the Form of sevenness]. Who then is it who introduces (*epipherei*) the heptad to the units? And who introduces the form of bed to such and such a combination of pieces of wood? Isn't it clear that artistic soul by having the art gives form to the wood to generate a bed? Well, arithmetic soul, by having in itself the originative unit gives form and existence to all numbers. But there is this much difference: art does not belong to us by nature and it requires labour because it is involved with perceptible matter. But arithmetic is in us by nature (and so belongs to all people), and it is concerned with the matter that is intelligible so that it can give form to the matter easily and without time. It is perhaps for this very reason that most people make the mistake of thinking that seven is nothing apart from so many units. For the imagination of individuals, if it has not first seen the disordered and then the activity of what orders extending into it and then in all cases the thing, whatever it is, completed and given form, does not believe that it sees two natures, one without form, the other formal, and further outside of these the nature which introduces

the form; but it says that the substratum is one and ungenerated, and in no way conceives the cause of it[s being one]. IM

(3) Syrianus *in Metaph.* 136,3-17

But it is thought that mathematical number is one since it is universal. Consequently also this mathematical number, e.g., three and four and each of the others is one, so that the total which is composed from them also remains one. For if someone says that the total is many and infinitely many, like particulars which are the same in kind, we will again have recourse to the single form which mathematics investigates. And we will find one form of the total, as a mathematical number, embracing one dyad, one triad and not many, so that in turn neither will the total become multiple nor will this [multiplication] proceed *ad infinitum*. Consequently we do not divide the decad into five dyads, but we say that the substratum of the decad takes up the substratum of the dyad taken five times. Nor do we compose the decad from five dyads, in order that we not declare its form to be composite (something we see does not occur even in the case of perceptible forms which come to be by nature). And in general we do not say that a number is many and divided along with its substratum, but that each comes into existence many times – if it is going to be number purely and not something numbered. IM

(4) Syrianus *in Metaph.* 134,14-20

For if one conceives the first, second and third triad in the ennead, you will see one undifferentiated triad taken three times. And in general in nine you will see nothing else than the form of the ennead applied to quantity, but if you divide its substratum by your discursive reason (*dianoia*) (the form is [really] indivisible), you immediately give shape to it with the forms appropriate to the division. For our soul does not manage to see what is disordered and without form especially if it is the master of giving order to it. IM

(5) Syrianus *in Metaph.* 135,16-23

These things are very well said about the many units, and they prove that not only units, but also equal numbers are undifferentiated. Consequently, as we have said, three is one [thing] even if it is taken many times in thirty. For among numbers things which are equal are the same. Thus the dyads in the decad are undifferentiated, not because their units are undifferentiated (although they are), but because their form is one. And it is one, not because it has given itself into undifferentiated substrata [the units] (since it makes only one dyad), but because it has proceeded from the originative unit and remains purely one. IM

12(c) Neoplatonists on objects of arithmetic residing in thought

Reading

Iamblichus *de communi mathematica scientia*, a draft translation by J.O. Urmson, is in the library of the Institute of Classical Studies, University of London.

Jaap Mansfeld, *Prolegomena Mathematica, From Apollonius of Perga to Late Neoplatonism*, with an appendix on Pappus and the history of late Neoplatonism, Leiden 1998.

Arthur Madigan, 'Syrianus and Asclepius on Forms and intermediates in Plato and Aristotle', *Journal of the History of Philosophy* 24, 1986, 149-71.

Ian Mueller, 'Syrianus and the concept of mathematical number', in G. Bechtle, D. O'Meara, eds, *La philosophie des mathématiques de l'antiquité tardive*, Fribourg 1998, 71-83.

Anne Sheppard, '*Phantasia* and mathematical projection in Iamblichus', in *Iamblichus, the Philosopher*, *Syllecta Classica* 8, 1997, 113-20.

13. Simplicity and the Need for the One

The final chapters of this volume are concerned with the metaphysics of the intelligible world, to which Plotinus gives the essential introduction.

Is the object of divine intellectual thought simple? Aristotle and Alexander say this of God's thinking.

(1) Aristotle *Metaph.* 12.9, 1075a5-7

Again, there remains a question whether the object of [divine] thought is composite. For it would then shift between the parts of the whole. Rather, everything that lacks matter is indivisible. RRKS

Alexander(?) *Mantissa* 109,4-110,3 treats the divine Intellect, which it calls the first Intellect in actuality, differently from the human dispositional intellect. The first Intellect in actuality needs to be simple, and so thinks *only* itself, and presumably no other intelligibles.

Alexander's(?) view, as explained in **Psychology 4(a)**, makes one wonder whether the thought of this first Intellect in actuality would be contentless. Plato *Charmides* 167A-169C, followed by Alexander's contemporary, Sextus Empiricus *Math.* 284-6; 310-12, had attacked the idea of contentless vision and knowledge. The thinking of Alexander's(?) first Intellect, as explained, *loc. cit.*, runs a risk of either being contentless, or losing its simplicity, depending on the reasons for its self-thinking.

To summarise: if we look at the human dispositional intellect, the first reason (i) given for its self-thinking is taken by Alexander(?) from Aristotle *On the Soul* 3.4, 430a2-4; *Metaph.* 12.7, 1072b19-21. Since Aristotle there holds that the thinking intellect is identical with the objects of its thought, it follows that, in thinking its objects, it is thereby thinking itself. This allows that its thinking may have a rich intellectual content, because the objects with which it is identical may be rich. Alexander's(?) second reason for self-thinking (ii) will apply only to the human dispositional intellect. It is that this intellect thinks *all* intelligibles, and so, since it is one of the intelligibles, thinks itself. The first Intellect in actuality is different. As remarked, it thinks *only* itself because it needs to be simple, 109,28. But Alexander(?) adds, 109,24, that the *same* reason for self-thinking applies to it. If this is reason (i), it can have a rich content, but at the cost of its simplicity. If, as seems to be the case, it is reason (ii), it risks having no content to its thought.

Plotinus may well have been aware of all the passages cited. He replies to Sextus, for example, in 5.3 [49] 5. In **Psychology 4(a)** it is suggested that he has an answer at 5.3 [49] 5 (42-8). The discussion of Alexander(?) which follows does not appear to offer an answer.

(2) Alexander(?) *Mantissa* 109,4-110,3

(i) The intellect which possesses the disposition [for intellection] and is acting can think itself. For it is not in that it is an intellect that it will possess thinking and being thought together and in the same respect, but first [of all it will do so] in the way in which intellect in actuality is the same as things that are thought in actuality. Thinking these, it will think itself, if, in thinking, intellect becomes the same as the things which it thinks. For if the things that are thought are the same as intellect in actuality, and it thinks these, it comes to think itself. For in intelligising it comes to be the same as the things that are thought, but when not intelligising it is other than they. In this way sensation too may be said to sense itself, since it senses the things which in actuality become the same as it. For as we said, sensation in actuality, too, *is* the thing that can be sensed. For both sensation and intellect apprehend their proper [objects] by grasping the forms without the matter.

[109,14] (ii) Moreover, intellect may be said to think itself not in that it is intellect, but in that it is itself intelligible. For it is as intelligible that it apprehends [itself], just as [it does] each of the other intelligibles too, not as intellect. For it is an incidental attribute of intellect that it is also intelligible; for since it too is one of the things that there are, and it is not perceptible by the senses, the remaining [possibility] is that it be intelligible. For if it was as intellect and in that it is intellect that it was the object of its own thought, it would not think anything else that is not intellect, and so it would think only itself. But [as it is], in thinking the intelligibles which before they are thought are not intellect, it also thinks itself as like this, as being one among the intelligibles. So this intellect incidentally comes to think itself, advancing from the material intellect.

[109,23] And the primary intellect, intellect in actuality, also thinks itself in a similar way and for the same reason. But it has something more than this [human] intellect; for it does not think anything other than itself. For by being intelligible it is the object of its own thought; and, by being intelligible in actuality and in its own nature, it will always be an object of thought; and clearly [it will be the object] of what is always intelligising in actuality. But the only thing that is always intelligising in actuality is intellect itself; so it will always think itself. [It will think itself] alone, inasmuch as it is simple. For intellect that is simple thinks what is simple, and nothing else is a simple intelligible except itself. For it is unmixed and without matter and having nothing potential in itself. So it will think itself alone. Thus in that it is intellect, it will think itself as intelligible; in that it is both intellect and intelligible in actuality, it will always think itself; in that it alone is simple, it will think itself alone. For itself alone being simple it thinks something simple, and it itself alone among the intelligibles is simple. RWS

Plotinus, it has been suggested, was influenced by the search for simplicity in this

passage of the *Mantissa*. If so, he takes a different route in seeking simplicity. Alexander(?), unlike Plotinus, expects to find simplicity at the level of Intellect. But Plotinus complains at 5 [49] 3.10-13 that, since the Intellect sees itself, it is not altogether simple, nor the simplest, nor is its object simple. We need to recognise, then, that there is an absolutely simple One which is pre-thinking (*pronoein*), or beyond thinking, and does not think. Aristotle had described God's simple thinking as a kind of contact, *Metaph.* 9.10, 1051b17-33. But Plotinus sees contact as not being thinking at all.

(3) Plotinus 5.3 [49] 1 (1-16)

Must that which thinks itself be complex (*poikilos*) so that by using one part of itself to contemplate the other parts it can be said to be thinking itself? Is that which is entirely simplex (*haplous*) unable to turn in (*epistrephein*) on itself and its self-intellection? Or is it possible that even something which is not a composite can have intellection of itself? For that which is said to be able to think itself because it is a composite, in that it thinks one part of itself by means of another (just as we ourselves grasp by means of sense-perception our shape or the rest of our bodily characteristics) could not be said to truly know itself. For it would not be the whole which is known in this way if the thinker had not thought itself as well as its concomitants, and this will not be the self-thinker we are looking for, but one thing thinking another. So we must posit the self-intellection of a simplex and consider how this can be the case – if it can be – or else abandon the idea that anything can really think itself. But it is absolutely impossible to abandon it because of the many problems that that would cause. BF

(4) Plotinus 5.3 [49] 10 (5-6; 14-18; 21-51)

Is this Intellect? What then? Does it not see itself? Well, this Intellect has no need of sight.

So there must be more than a unity for there to be sight, and sight must coincide with its object, and what is seen by the seer must be a plurality within the whole; for that which is entirely a unity has nothing towards which it can direct its activity, but will be entirely static, alone and isolated; but in that it is active, it contains differentiations.

If something is not directing itself towards something else, it will be static; and when it is altogether static, it will not be thinking. So that which thinks, when thinking, must be in a duality whether each [it and its object] is outside the other or whether both are in the same thing; intellection must of necessity always consist in both difference and sameness.

[25] All the objects of thought in the strict sense must be both the same and different in relation to it. Again each of the objects of thought conveys together with itself (*sunekpherein*) this sameness and difference. Otherwise what will that which contains no differentiation think? For if each

object is a forming principle, there will be a plurality. So it gains knowledge of itself by being a diverse organ of vision, or by being an organ capable of seeing diverse colours. For if it were directed towards a unity without parts, it would be non-plussed – for what could it say about it, or how could it understand it? For if what is entirely without parts had to declare itself, it would first need to declare all that it is not, and in this way would be a plurality in order to be unity. Again when it declares 'I am this', if it declares the 'this' as something other than itself, it is lying; if it is accidental to it, then it will be declaring a plurality – or else it will be declaring 'I am I am' or 'I I'. What then if it were simply a duality and declared 'I and that'? Well, it is bound in that case to be already a plurality, since there is a distinction and a how for the distinction – there is now number and many other things. Therefore it is necessary for the thinker to grasp a variety of objects, and for the object of thought, as it is being thought, to be diverse. Otherwise there will be no thought of it, but just contact and, so to speak, an unexpressed and unconceived touch, something prior to thought (*pronoein*), since thought would not yet exist, and what is in contact not yet be thinking.

[44] But that which thinks must not itself endure as a simplex, especially in that it thinks itself; even if it presents silence as understanding, it will divide itself into two. On the other hand [the simplex] will not need to busy itself with detail about itself; for what will it learn by thinking, since its essence belongs to it before it thinks? Again knowledge too is a yearning and a sort of discovery on the part of the seeker. So that which stands entirely apart remains self-directed and does not try to find anything out about itself; but that which unfolds itself would also be a plurality. BF, RRKS

(5) Plotinus 5.3 [49] 11 (1-11; 20-22; 25-30)

That is why Intellect is a plurality when it desires to think the transcendent; so although the transcendent is a unity, in desiring to apprehend (*epiballein*) it as a simplex, Intellect reaches out, for ever taking to itself some part of it, thereby making it a plurality. Consequently it approaches it not as Intellect but like sight which has not yet seen its object, but which reaches out, possessing what it itself has pluralised, so that it desires something other than itself, having within itself some indeterminate image (*phantasia*); but it reached out taking to itself and pluralising something other than itself. For sight has an image of its object. Otherwise it could not have allowed it to be formed within itself. This image became a plurality out of a unity. Intellect came to know the image and saw the unity; that is when it became sight that has seen.

All things are inside Intellect, so that for this reason [the One] is prior to Intellect. If its posteriors have the status of being all things, then for this reason it would be prior to all things.

If it is Intellect because it is manifold, and if its thinking is a sort of

intruder, even if it is derived from it, and pluralises it, then what is entirely simplex and the first of all things must be prior to Intellect. For if it thinks, it will not transcend Intellect but will be Intellect; and if it is Intellect, it will itself be a plurality. BF

(6) Plotinus 5.3 [49] 13 (5-36)

We try, as far as is possible, to indicate something [of the nature of the One] to ourselves. But when we are in doubt and say 'So it does not perceive itself, is not aware of itself (*parakolouthein*) or even know itself' we should realise that in saying all this we are proceeding in quite the wrong direction. For we are making it a plurality by making it both an object and an act of knowing, and by granting that it does think we make it need to think. Even if thinking does go with it, its thinking is superfluous.

[12] In general, thinking, viz. when something thinks itself, seems to be the perception of a whole whose parts meet at a single point – that is thinking in the strict sense; each individual part is in itself something and seeks nothing further. But if its thinking has an external object, then it is lacking something and is not thinking in the strict sense. But what is entirely simplex and truly self-sufficient lacks nothing. What is self-sufficient in a secondary sense and needs itself – that is what needs to think itself; what is lacking in respect of itself causes its self-sufficiency to be sufficient by being the whole; it comprises all things, resides within itself and inclines towards itself; for its self-awareness (*sunaisthêsis*) is a perception of a plurality, as the word suggests. Even thought, which is prior, turns inwards on a self which is clearly a plurality; for it only has to say 'I am a Being', and it is speaking as if discovering something outside itself, and rightly so, since Being is a plurality. For when it devotes its attention to itself as if a simplex and says 'I am a Being' it fails to find either itself or Being. For it does not speak of Being as of a stone, when it is speaking the truth; in that single phrase it has uttered a plurality. For this Being, which is spoken of as true Being (and not something which has a trace of Being, which for that reason could not be called Being and is like image compared with archetype) contains a plurality.

[31] Well then, will not each part of this plurality be an object of thought?

No; if you wish to take each part 'pure and simple' you will not be thinking it. But Being itself is a plurality within itself, and anything else you care to mention is part of Being. But if this the case, if there is something which is most simplex of all, it will not possess self-intellection. If it did it would possess it by being a plurality.

Therefore the One does not think nor can there be any intellection of it. BF

Reading

A.H. Armstrong, 'The background of the doctrine "That the intelligibles are not

outside the Intellect" ', in *Les Sources de Plotin, Entretiens Fondation Hardt* 5, Geneva 1957, 391-425.
E.R. Dodds, 'The *Parmenides* of Plato and the origin of the Neoplatonic One', *Classical Quarterly* 22, 1928, 129-42.

Nonetheless, in an early and in some respects uncharacteristic text, 5.4 [7], the One can be described as having life and a special kind of *katanoêsis*, which is different from the thinking (*noêsis*), in which Intellect engages.

(7) Plotinus 5.4 [7] 2 (12-19)

The intelligible is enduringly itself and is not lacking as the seer and thinker are (in the sense that the thinker is lacking in relation to the intelligible); it is not like something devoid of sensation, but all its parts are in it and with it; it is completely able to discern itself; life resides in it, all things reside in it; its apprehension (*katanoêsis*) of itself is itself, an apprehension which enjoys, in a sort of self-awareness (*sunaisthêsis*), eternal rest and thought (*noêsis*), but not in the same manner as thought of Intellect. BF

The preceding lines (3-11) contain a parallel argument that Intellect cannot be the ultimate generator because of its lack of simplicity. Similarly 5.1 [10] 5 (3-9).

Reading

Cristina d'Ancona, 'Re-reading *Ennead* 5.1 [10] 7', in John J. Cleary, ed., *Traditions of Platonism. Essays in Honour of John Dillon*, Aldershot 1999, 237-61.

14. The Three Hypostases: Soul, Intellect, One

14(a) Plotinus

With the introduction of the One, we have Plotinus' three hypostases, or levels of reality. The lower two levels, the World Soul and the Intellect of the Divine Craftsman, both feature in Plato's *Timaeus*. But Plotinus finds the authority for his third and supreme divinity, the One, elsewhere. The Presocratic Parmenides argued that we can only speak or think of one thing. Next, Plato's dialogue, the *Parmenides*, explores the contradictory properties that Parmenides' One would have, making it ineffable. Thirdly, Plato in old age delivered a lecture on the Good, which is partly reflected in Aristotle's *Metaphysics*, especially books 13 and 14, and in his fragmentary *On the Good*, partly preserved by Alexander *in Metaph.* 1. In *Metaph.* 1.6, Aristotle says that Plato went beyond the Forms, finding the principles of both Forms and Numbers in what he called 'the One' and either 'the indefinite Dyad' or 'the Great and the Small'. In their turn, the Forms were principles for the sensible world only in combination with the Indefinite Dyad. The One in this system, as later with the Neoplatonists, is thus beyond the Forms.

Plotinus could have been encouraged to recognise three levels of divinity by Middle Platonists in the Pythagorean tradition who had done so before him, Moderatus of Gades and Numenius of Apamea. See John Dillon, M. Frede, Charles Kahn, and E.R. Dodds.

(1) Plotinus 5.1 [10] 10 (1-30)

It has already been demonstrated that we must think as follows: there is something beyond Being, the One – as our argument tried to show, as far as proof is possible, in this case; after that come Being and Intellect; thirdly there is the nature of Soul. Just as these three things mentioned exist in nature, so we must think that they exist in us. I do not mean in the sensible world, for they are separate, but in what is above it and beyond the sensible; they are 'beyond' in the same way that they are beyond the whole of the heavens. And I mean the aspect of man which Plato calls 'the inner man' [*Rep.* 9, 589A-B1]. So our soul too is something divine and of a different nature, just like the nature of Soul in its entirety. The soul which possesses intellect is perfect; intellect is on the one hand that which reasons [sc. material intellect] and on the other hand that which grants the power to reason [sc. actual intellect]. This reasoning part of the soul, which needs no bodily organ for its reasoning, but possesses its activity in purity so that it may be able to reason in purity too, is separate and not mixed with body. One would not be wrong to place it in the primary Intelligible World; for we should not look for somewhere to place it, but should set it

outside place altogether. For it is in this sense that we say of it that it is 'by itself', 'beyond' and 'immaterial' – when it is alone, taking nothing from the nature of body. BF

Blumenthal warns that the contrast between Soul and Intellect in Plotinus is not always sharp.

Reading

H.J. Blumenthal, '*Nous* and soul in Plotinus: some problems of demarcation', repr. in his *Soul and Intellect: Studies in Plotinus and Later Neoplatonism*, London 1993, from *Plotino e il neoplatonismo in Oriente e in Occidente*, Accademia Nazionale dei Lincei, Rome 1974.

John Dillon, *The Middle Platonists*, London 1977.

E.R. Dodds, 'Numenius and Ammonius', in *Entretiens Fondation Hardt*, 5, *Les Sources de Plotin*, Geneva 1960, 3-32.

M. Frede, 'Numenios', *Aufstieg und Niedergang der römischen Welt* 2.36.2, 1034-75.

Charles Kahn, *Pythagoras and the Pythagoreans*, Indianapolis 2001, ch. 8, 94-138.

14(b) Later Neoplatonism

This simple scheme of three hypostases was greatly complicated in later Neoplatonism, notably in Proclus, *Platonic Theology*, who draws on his teacher Syrianus and, further back, in Iamblichus, and who is later answered by Damascius *On First Principles* and *Commentary on Plato's Parmenides*. It is from the first two hypotheses of Plato's *Parmenides* that Proclus claims to draw his scheme. It is expounded in helpful tables in Saffrey's introductions to the six volumes of the Budé edition of Proclus, *Platonic Theology*, ed. Saffrey and Westerink, see esp. vol. 1, lx-lxxv. See also Combès' introductions to the Budé edition of Damascius' *On First Principles* and *in Parm.*, eds. Westerink and Combès. Besides accommodating the attributes affirmed of the One in the second hypothesis of Plato's *Parmenides*, Proclus seeks to include all the principles and divinities found in Plato and in the Orphic and Chaldaean traditions. I shall mention here only a few of the main distinctions that will come up in passing in the texts translated here.

The level of the One is complicated by the recognition of henads just below the One. The level of Intellect is divided into a triad, the intelligible gods corresponding to the level of Being, the Intelligible-Intellective gods corresponding to the level of Life, and the Intellective gods corresponding to the level of Intellect. This triad, Being, Life, Intellect, which will become particularly relevant in the next section, **15(c)**, is further repeated in sub-distinctions within each member of the basic triad. Below these transcendent gods, there is a level of hypercosmic and of encosmic gods, bridged by an intermediate level of hypercosmic-encosmic gods. We then move down to universals, souls and after that to angels, daemons and heroes.

Damascius, while not denying that there are triads, and even an ennead of three triads, stresses the unity of the scheme, *On First Principles* 3.142.4-6, by saying that it is an appearance like that of uniform sunlight when it is broken up into the colours of the rainbow. He further tells us not to count the intelligible world on our fingers, but to shut our eyes and open the eye of the soul which sees no distinctions 3.136.8-21.

(1) Damascius *On First Principles* 3.142,4-6 Westerink-Combès

It is as the uniform colour of the sun appears in cloud with three mirroring dimensions in the rainbow which appears multicoloured. RRKS

(2) Damascius *On First Principles* 3.136,8-12; 14-17 Westerink-Combès

To speak generally, let us not count the intelligible on our fingers, nor lay hold of it with discrete concepts (*ennoiai*), but let us bring all our thoughts together, shut our eyes, and open the one big eye of the soul which sees nothing discrete. ... Let us look in that direction with an eye like that, and see, even from afar and as it were from the outermost limits, that the intelligible is everywhere undifferentiated and everywhere uncounted. RRKS

Reading

Polymnia Athanassiadi, 'The Chaldaean Oracles: theology and theurgy', in her and Michael Frede's, eds, *Pagan Monotheism in Late Antiquity*, Oxford 1999, ch. 5.

Gerd van Riel, ' "N'essayons pas de compter l'intelligible sur les doigts", Damascius et les principes le la limite et d'illimité', *Philosophie Antique* 2, 2002, 201-19.

14(c) Christianity and monotheism

There were analogues among the Neoplatonist commentators of the Christian Trinity. In the early fifth century, Augustine allows that when Porphyry speaks of three Gods, God the Father, God the Son, and something intermediate, he has a dim recognition of the three persons of the Christian God. Augustine knows, however, that Plotinus' third hypostasis, soul, is not intermediate, and so does not correspond to the remaining person, the Holy Spirit. Moreover, Plotinus' three hypostases are subordinated to each other, unlike the three persons of the Trinity. It has been pointed out by P. Hadot that what Augustine is referring to is a triad of Porphyry's which all belongs to the one level of the Neoplatonist Intellect: Being (known in the Chaldaean Oracles as Father), Life (the power of the Father) and Intellect (activity). For other Christians using Porphyry's Trinity, see P. Hadot on Marius Victorinus and Synesius and J. Dillon on Gregory Nazianzus.

Reading

John Dillon, 'Logos and trinity: patterns of Platonist influence on early Christianity', in G. Vesey, ed., *The Philosophy in Christianity*, Cambridge 1989, 1-13, repr. in John Dillon, *The Great Tradition*, Aldershot 2000.

P. Hadot, *Porphyre et Victorin*, 2 vols, Paris 1968, vol. 1, ch. 7.

P. Hadot, 'L'image de la Trinité dans l'âme chez Victorinus et chez saint Augustine', *Studia Patristica* 6 = *Texte und Untersuchungen zur Geschichte der altchristlichen Literatur* 81, Berlin 1962, 440-1.

Christians themselves allowed talk of 'gods' in the plural because such talk is found in the Old Testament (see M. Frede for what follows), notably in the Psalms, and they discussed three possible applications of the term, to angels, to human saints, and to the three persons of the divine Trinity. The passage assigned by Harnack to Porphyry *Against the Christians* as fr. 76 pleads that it is a merely verbal question

whether one speaks of the angels as 'gods'. The Christian Origen had already conceded that this was allowed by the Scriptures, so long as it was not taken to authorise worship, *Against Celsus* 5.4, and Augustine *City of God*, responding to Porphyry, goes further. He agrees that it is only a verbal question whether one speaks of the angels as 'gods', provided it is recognised that their divine characteristics of immortality and blessedness are derived from the one God, whose divinity is not derivative. Moreover, Augustine allows that Psalms 82:6 authorises us to speak even of some humans as gods.

As regards the three persons of the Trinity, God the Father, God the Son, and God the Holy Ghost, Origen, *Commentary on John* book 2, ch. 2, sec. 17, says that Christ, the Son, can be called '*a* God', by participation in the Godhead of *the* God, the Father. Eusebius *PE* 11.14.3 describes Father and Son as first and second God. Among the commentators, in addition to the recognition of three gods by the pagan Porphyry, acknowledged by Augustine *City of God* 10.29, as already reported, there is an important reaction in the Christian Philoponus. He argued that the three persons of the Christian Trinity should be called three gods or three substances, possessing unity only as a universal in our thoughts (references in Richard Sorabji, 'John Philoponus' in his *Philoponus and the Rejection of Aristotelian Science*). Admittedly, Philoponus' proposal was condemned by the Christians as Tritheism, and Origen's proposal was also rejected, though more for the subordinate position it gave to Christ.

The sixth-century pagan commentator, Olympiodorus, is able to claim to his Christian students in Alexandria that he too is a monotheist, using a rationale analogous to that applied by Augustine to Porphyry. For he recognises there is only one cause. All that the various Neoplatonist gods introduce is some intermediary agencies for that cause to use, *in Gorg.* 32-3; 243-4 Westerink. In fact, five *in Cat.* commentaries say that the prupose of reading Aristotle's philosophy is to know that there is only one supreme source, Ammonius 6,9-16; Philoponus 5,34-6,2; Olympiodorus 9,14-30; Simplicius 6,6-18; Elias 119,26-121,4, and Elias, the Christian professor, argues (against objections) that this was Aristotle's view.

(1) Augustine *City of God* 10.23, Dombart and Kalb *CCL* 47, lines 8-21

We know what he [Porphyry] as a Platonist says are principles. He says God the Father and God the Son. The latter he calls in Greek the paternal Intellect (*intellectus*), or the paternal Mind (*mens*). But about the Holy Spirit he says either nothing, or nothing openly, although I do not understand whom he means as a distinct third between these two. If he too, like Plotinus when he discusses the three principal substances, wanted us to understand a third nature consisting of soul, he would not in any way have described it as being intermediate between these, that is between Father and Son, since Plotinus puts the nature of soul after the paternal Intellect. But Porphyry, in saying 'intermediate', puts [this nature] not after, but in between. No doubt, what he referred to, as best he could or was willing, is what we call the Holy Spirit, the Spirit not of the Father only, nor of the Son only, but of each. RRKS

(2) Augustine *City of God* 10.29 Dombart and Kalb *CCL* 47, 10,29, lines 1-20, including Porphyry *de Regressu Animae* frr. 8 and some of 9 Bidez = 284aF and 297F Smith

You [Porphyry] proclaim the Father and his Son, whom you call the Father's Intellect or Mind (*intellectus, meus*), and something intermediate by which we think you mean the Holy Spirit, and in your manner you call them three gods. Here, even though you use untutored words, you see in some way or other, as if through the shadows of a faint imagination, the goal we should strive towards. But you people are not willing to acknowledge the incarnation of the changeless Son of God, by which we are saved, so that we can attain to the things we believe in, or in very small part understand. So you do see somehow, even if from a distance, even if with a darkened view, the home country where we should settle (*manendum*), but you do not grasp the way to go to it.

[11] Yet you acknowledge Grace (*gratia*), since you say it is granted (*concessum*) to few to reach God by the strength of their intellect. You do not say 'few decided', or 'few wanted'. When you say it is granted, you are doubtless acknowledging the Grace of God, not the adequacy of man. You even use this word ['Grace'] quite openly, when you follow Plato's opinion and have no doubt that in this life humans in no way reach perfection of wisdom, but that after this life all that is missing can be supplied to those who live according to intellect through the Providence of God and Grace. RRKS

(3) Porphyry *Against the Christians* in Macarius Magnes *Monogenes* 4.21, fr. 76 Harnack

For if you say that angels without passions (*apatheis*), immortal and indestructible by nature, stand before God, while we call them gods because of their closeness to the Godhead, what is the dispute concerning the name other than the mere belief that there is a difference in the appellation? RRKS

(4) Augustine *City of God* 9.23 Dombart and Kalb *CCL* 47, p. 269, lines 1-24

If the Platonists prefer to call these [angels] gods rather than daemons, and to count them among those whom their founder and master Plato writes of as gods created by the supreme God, let them say what they want. For we should not labour over a controversy with them about words. For if they say [the angels] are immortal by way of being made by the supreme God, and blessed not through themselves but by clinging to him by whom they were made, they say what we say, whatever name they use. ...

But the same Scripture gives the name 'gods' also to humans among the people of God. It says, 'I said you are gods and all children of the Highest' [Psalm 82:6]. So we can understand that he who is called 'God of gods' [Psalms 50:1; 136:2] is God of these gods, and that he who is called 'A great King above all gods' [Psalm 95:3] is a great King above these gods. RRKS

(5) Olympiodorus *in Gorg.* Lecture 47.2-3, 243,16-25; 244,1-17 Westerink

You must know that the philosophers hold that there is one principle of all things and one primary supramundane cause from which all things have sprung, and to which they have not even given a name.

[pseudo-Dionysius(?) *Hymn*] How shall I hymn you, who exceed in all things? What words will celebrate you who cannot be encompassed even by intellect?

They say, then, that the principle of all things is one, but that it does not produce the world here below directly; for that would be contrary to the natural order of things, if our world were created immediately by the First Cause. ... It was therefore necessary that other, greater powers should be created by the First Cause and then, by these, ourselves, who are the dregs of the universe, since we had to be, or the world would be incomplete. There are, then, other, greater powers, which the poets call the Golden Cord because of their unbroken continuity. First there is the intellectual power, then the vivifying power and the healing power, and so forth; when they want to express them in words, they give them symbolic names. So do not be confused by mere words, when you hear of Kronian and Zeusian powers, and so on, but think of the reality for which they stand, think that we try to express something else by those words. If you like, you may take it that these powers have no being of their own and no separate existence, but that they are implicit in the First Cause, to which you can ascribe intellectual and vivifying faculties. And therefore, when we say Kronos, do not be shocked by the word, but ask yourself what I mean: Kronos is *koros nous*, i.e. pure intelligence. HT

(6) Origen *Commentary on John* book 2, ch. 2, sec. 17 Blanc, *Sources Chrétiennes*

Something worries many lovers of God when they pray. They are wary of proclaiming two gods and thereby fall into false and unholy doctrines, either denying that the Son has an identity (*idiotês*) different from that of the Father and agreeing that the one they call 'the Son', as far as his name is concerned, is God, or else denying his Godhead and positing his individuality and essence by some chance description different from the Father's. The worry can be solved as follows.

We must say to them that God is God himself, which is why the Saviour says in his prayer to the Father, 'in order that they may know that you are the only true god'. But everything besides God himself is made God by participation in his Godhead, and is not 'the God', but 'a God'. RRKS

(7) Origen *Against Celsus* book 5, sec. 4, lines 15-19 Borret, *Sources Chrétiennes*

We find them [the angels], because they are divine, sometimes being called

'gods' in the Scriptures, but not in such a way as to order us to hallow and worship (*sebein, proskunein*) those who minister to us and bring us God's gifts. RRKS

(8) Eusebius *Praeparatio Evangelica* 11.14.1-3 des Places, *Sources Chrétiennes*, vol. 292

Let us agree in this way what to say about the First Cause of everything. But we must also consider what to say about the Second Cause, which the prophecies of the Hebrews teach is the Word (*logos*) of God, and God from God (*theos ek theou*), as our theology too has taught us to think. Thus Moses' theology completely accepts two Words, where he says [Genesis 19:24] 'And the Lord from the Lord rained fire and brimstone on the city of the unholy'. He produced there, as usual, the same combination of Hebraic characters for the two. This is the ineffable theology expressed by four letters. And David, another prophet, and at the same time King of the Hebrews, concurs with this when he says, 'The Lord said to my Lord, "Sit at my right hand" ' [Psalms 110:1], indicating the highest God (*theos*) by the first 'Lord' and the one second to him by the second designation. RRKS

Reading

Polymnia Athanassiadi and Michael Frede, eds, *Pagan Monotheism in Late Antiquity*, Oxford 1999.

Michael Frede, 'Monotheism and pagan philosophy in later antiquity', in Athanassiadi and Frede (above), 41-67.

Richard Sorabji, 'John Philoponus', in his, ed., *Philoponus and the Rejection of Aristotelian Science*, London & Ithaca, NY 1987.

L.G. Westerink, 'The Alexandrian commentators and the introductions to their commentaries', revised from *Anonymous Prolegomena to Platonic Philosophy*, Amsterdam 1962, in Richard Sorabji, ed., *Aristotle Transformed*, London & Ithaca, NY 1990.

15. Realism vs. Intentionality

15(a) Sensibles

The Greek commentators had an important influence on the idea that the forms received in perception are intentional, not real, as explained in **Psychology 1(e)**.

Reading

Richard Sorabji, 'From Aristotle to Brentano: the development of the concept of intentionality', *Oxford Studies in Ancient Philosophy*, suppl. vol., 1991, 227-59.

15(b) Objects of discursive thought

See also **7(a)** above. Discursive thought (*dianoia, logos*), for Neoplatonists, uses complex *noêmata* (thoughts) which Dominic O'Meara has described as intentional. But insofar as discursive thought seeks to apprehend the simples of the intelligible world, as in Proclus' *Elements of Theology*, it distorts by analysing them into complexes, and, in Iamblichus' terms, the *noêmata* give us only inferior knowledge of them.

Reading

Dominic O'Meara, 'Intentional objects in later Neoplatonism', in Dominik Perler, ed., *Ancient and Medieval Theories of Intentionality*, Leiden 2001, 115-25.

A.C. Lloyd, *Anatomy of Neoplatonism*, Oxford 1990, 157.

15(c) Intelligibles

The highest kind of thinking is that of Intellect (*nous*), and Intellect, in thinking, is identical with its objects in the intelligible world, as explained above under **13**. Identity is a much closer relation than that of being directed towards, or being about something. It is not incompatible with directedness or aboutness, since we recognise that in exceptional cases a thought may be about itself. But it certainly does not express, or even draw attention to, the idea of directedness or aboutness. Nonetheless, might the objects of Intellect be thought-dependent in a way that made them intentional? One would have expected them in that case to be posterior to Intellect rather than identical with it. But the evidence needs close attention. It will turn out that, so far from being posterior, they are in a way prior to Intellect, and so even more clearly not intentional. Some of the Plotinian passages which might seem to suggest the contrary are dialectical in character.

In fact, Plotinus had to give some priority to the objects of Intellect, in order to conform with Plato's denial in *Parmenides* 132B-C that the Forms are merely thoughts, or exist only in souls, although P. Hadot has suggested that Plotinus may be attacking not so much that suggestion, as the view of the Middle Platonist Alcinous *Didaskalikos* chs 9-10, that Forms are thoughts in the mind of God.

(1) Plato *Parmenides* 132B3-C12

But Parmenides, said Socrates, perhaps each of these Forms is a thought (*noêma*) and they have the property of appearing nowhere else but in souls. For in this way each would be one and would no longer suffer the things you just mentioned.

Well now, said Parmenides, is each of these thoughts one, but a thought of nothing? – But that is impossible, said Socrates.

Then it is a thought of something? – Yes.

Of something that is or is not? – Of something that is.

Is it not a thought of some one thing, which that thought thinks of as being over all things, being some one Form? – Yes.

Then will that which is thought to be one not be a Form, being always the same over all things? – That in turn appears necessary.

Well now, said Parmenides, does it not seem to you, by the same necessity by which you say the other things partake in the Forms, that either each thing is made of thoughts and all things think, or that being thoughts they are unthinking? – This account too is absurd. RW

(2) Plotinus 5.9 [5] 7 (12-18)

God did not come into being when [Intellect] thought god; nor did movement come into being when it thought movement. So it is wrong to call Forms acts of thinking (*noêseis*) in the sense that any particular Form only exists or comes into being when Intellect thinks it, since the object of thought (*to nooumenon*) must be prior to its being thought; how else could Intellect come to think it? For it does not apprehend by chance or at random. BF

Thought-dependence might seem to be implied by Plotinus' view that the objects of Intellect are within the Intellect. But Plotinus understands this as implying the *identity* of Intellect with intelligibles, not the priority of Intellect. In fact, in that discussion he denies priority and says:

(3) Plotinus 5.9 [5] 5 (27-8)

[The real beings] are neither prior nor posterior to [Intellect]. BF

So far all seems plain sailing: intelligibles do not have the posteriority of thought-dependent entities, but are rather identical with Intellect. Unfortunately there are complications about the claim just illustrated above from 5.9 [5] 5 (27-8), that intelligibles are not prior to Intellect either. Admittedly this claim is repeated in the discussion of their residing within Intellect, where Plotinus goes on to attack the following suggestion:

(4) Plotinus 3.9 [13] 1 (4-5)

Then does [Plato] say that the Ideas already exist before the Intellect and that Intellect thinks what [already] exists? RRKS

Yet Plotinus seems to require the intelligibles to be within Intellect on the apparently opposite ground that Being must after all be conceived as *prior* to Intellect (*proepinoein*), rather than simply identical with it.

(5) Plotinus 5.9 [5] 8 (11-12)

But since we must conceive of Being as prior (*proepinoein*) to Intellect, we must posit that real Beings lie within what is thinking them ... BF

There are further statements of the priority of intelligibles to Intellect.

(6) Plotinus 6.6 [34] 6 (30-2)

Thinking of movement, then, has not made Movement-itself, but Movement-itself has made the thinking. RRKS

(7) Plotinus 5.9 [5] 7 (16-17)

The object of thought must be prior to its being thought, how else could Intellect come to think of it? BF

(8) Plotinus 6.6 [34] 8 (17-18)

If, then, we must take Being first in that it is the first existent, then Intellect .... BF

These passages contain a number of reasons for wanting to make intelligibles prior to Intellect. How else, we are asked in 5.9 [5] 7 (16-17), just quoted, could Intellect come to think of them? This may be connected with the idea to which P. Hadot (1996) has drawn attention, in 6.6 [34] 6 (5-32), that thought is directed to a thing's defining characteristics, and the existence of defining characteristics presupposes the existence of the definiendum.

(9) Plotinus 6.6 [34] 6 (5-32)

First, then, we must grasp the substantiality (*ousia*) of the Forms in general. They exist not because the thinker thinks each one of them and then provides their existence (*hupostasis*) by his very thought. For it is not that justice came into being because he thought what justice is, nor that movement came into existence because he thought what movement is. That way, this thought (*noêma*) would be both posterior to the thing itself which is thought – the thought (*noêsis*) of justice posterior to justice – and

conversely the thought (*noêsis*) would be prior to what came into existence as a result of the thought, if it came into existence through his having thought.

[14] But if justice is identical with a thought (*noêsis*) of this kind, first it is strange that justice would be nothing but a sort of definition (*horismos*) of justice. For what is having the thought of justice or movement other than grasping their essence (*ti estin*)? And that would be the same as grasping the account (*logos*) of a thing that does not exist, which is impossible.

[19] But if someone said [cf. Aristotle *DA* 3.4, 430a3-5; 3.7, 431a1-2] 'in the case of things without matter, the knowledge and the thing are the same', we must understand what is said in this way. [Aristotle] is not saying that the knowledge is the thing, nor that the reasoning (*logos*) that contemplates the thing is the thing. Rather, the reverse: the thing itself, being without matter, is both object of thought (*noêton*) and act of thought (*noêsis*). It is not an act of thought in the sense of being an account (*logos*) of the thing or an intuition (*epibolê*) directed to it. Rather, the thing itself, being in the intelligible, is something other than thinking (*nous*) and knowledge, since knowledge is not directed to itself. But the thing which is [up] there transforms the knowledge, which is unstable like the knowledge of a thing in matter, and it makes it into true knowledge, that is, not a [mere] copy of the thing, but the thing itself.

[30] Thinking (*noêsis*) of movement, then, has not made Movement-itself, but Movement-itself has made the thinking. RRKS

Plotinus gives another kind of reason why Being is prior to Intellect at 5.9 [5] 8 (8-20); 6.6 [34] 8 (17-22). It is because Intellect is the activity of Being and Beings. This view of the Forms as not inanimate, but living and thinking, is based on a particularly straightforward reading of Plato *Sophist* 248E-249A. Modern interpreters avoid this interpretation of the *Sophist* passage by taking it that when thinking is ascribed to 'that which altogether is (*pantelôs on*)', the phrase includes intellect as well as Forms, and that it is in virtue of intellect that that which altogether is can be described as thinking. But Plato's *Sophist seems* to take it to be the Forms which are thinking. Plato *Timaeus* 39E also treats the Forms as living, and further encourages Plotinus to make Being prior to Intellect, because the Divine Intellect consults the Forms as a paradigm or model on which to base the creation of the sensible world.

(10) Plotinus 5.9 [5] 8 (8-20)

So if Intellect were conceived of as prior (*proepinoein*) to Being we would need to say that Intellect, in being active and thinking, perfects and generates real Beings. But since we must conceive of Being (*to on*) as prior (*proepinoein*) to Intellect (*nous*), we must posit that real Beings (*onta*) lie within what is thinking them, and that activity and thinking (*energeia, noêsis*) is present in real Beings, just as the activity of fire is already present in fire; real Beings contain the unity that is Intellect within themselves as their activity. But being too is activity, so that the activity of both Being and Intellect is one – or rather Being and Intellect are one.

Being, then, and Intellect are a single nature; that is why real Beings, the activity of Being and Intellect (thought of in this way) are a unity. And the acts of thinking (*noêseis*) conceived in this way are the form, the shape of Being and its activity. However it is when they are separated by us that one is conceived as being prior (*epinoein pro*) to the others. BF

(11) Plotinus 6.6 [34] 8 (17-22)

If, then, we must take Being (*to on*) first in that it is the first existent, then Intellect, then the living creature (for it has already been decided that this embraces everything), and if Intellect is second (for it is the activity of Being (*ousia*)), then number would not exist because of the living creature (for there are already a unity and a duality prior to it), nor because of Intellect (for Being, being a unity and a plurality, was prior to it). BF

(12) Plato *Sophist* 248E6-249A8

Stranger: Well, in Heaven's name, are we to be easily persuaded that motion and life and soul and thought truly do not belong to that which altogether is, and that it neither lives nor thinks, but solemn and sacred, having no intelligence, is without motion and at rest?

Theaetetus: That would be a terrible account to agree to.

Str.: But are we to say that it has intelligence, but not life?

Theaet.: Of course not.

Str.: But do we say that these are both present in it, but not then say that it has them in a soul?

Theaet.: How else could it have them? RW

(13) Plato *Timaeus* 39E3-9

Tim.: In other respects, up to the creation of time, he had made [the universe] in the likeness of that of which it was a copy, but it was unlike it insofar as it did not yet encompass within itself all the created living creatures. This remaining feature he brought about by moulding it with reference to the nature of the paradigm. He decided that the copy should contain species of the same nature and number as intelligence observes are within the paradigmatic living creature. RW

But how was Plotinus to avoid making Forms thought-dependent, given his view, illustrated next, that the Forms are generated by Intellect?

(14) Plotinus 6.7 [38] 15 (14-22)

The source is the Good, and their presence [that of the objects of contemplation] in Intellect is derived from the Good. It is Intellect that produces them from the Good. For it was not lawful for Intellect, when it looked at

the Good, to think nothing; nor to think the contents of the Good, for it would not in this way itself be generating them. So Intellect received from the Good its power to generate and to be pregnant with the products of its own generation; the Good gives what it does not itself possess. But it was from unity itself that plurality came to be present to Intellect, for being unable to contain the power it received, it began to fragment it, making its unity a plurality, so that in this way it might be able to sustain it part by part. BF

(15) Plotinus 5.1 [10] 7 (29-32)

[Intellect] is pregnant with its offspring, having as it were swallowed them back again by keeping them within itself, and not letting them be exiled to the world of matter to be brought up by Rhea. BF

Part of the solution emerges, it might be argued, when we notice the exact stages by which Intellect and Forms are created in Plotinus 5.2 [11] 1 (9-12). First, an overflow proceeds from the One, but this overflow is not yet Intellect. Before that, it has to halt and revert towards the One. It is at the stage of halting that the overflow creates Being, that is, the world of intelligibles and Forms. So Forms are created first, because the overflow is still not Intellect until having halted it also gazes on the One. It is the fact that halting precedes gazing that allows Being and the Forms to be prior to Intellect. Although the priority is presented as if it were chronological, it is really a priority in the order of explanation.

(16) Plotinus 5.2 [11] 1 (1-12)

The One is all things and not just one of them. It is the source of all things, not all things, but all things are that way inclined, for they have as it were run that way. Or rather, they do not yet exist, but they will. How, then, do they come from the One, which is simple, with no diversity appearing in it, nor doubleness of anything at all? It is because nothing was in it that all things came from it. In order that Being might exist, it is not Being, but is the generator of Being. And this, so to speak, generation is the first one, for being perfect by seeking nothing, having nothing and needing nothing, it overflowed and its overflow has made something different from itself. What came into being reverted to it and was filled and by looking at it became Intellect. The halting of the overflow to face the One created Being, and gazing at the One created Intellect. BF

Admittedly, Plotinus does not here make much of the priority of intelligibles, since the next two lines slur it over and suggest rather that there is neither priority nor posteriority. They say:

(17) Plotinus 5.2 [11] 1 (12-13)

Since, then, it halted to face the One, in order to see, it becomes at once Intellect and Being. RRKS

The outcome is that the intelligibles are not thought-dependent, because they are not posterior to Intellect. So they are not intentional objects. But as to whether they are prior to Intellect, or not, there is an apparent conflict. Can it be resolved? One quoted passage attempts to say the division between Idea and Intellect is only a division in thought between the intelligible and the intelligising, 3.9 [13] 1 (12-14), although this hardly takes account of the reasons for asserting a priority of the intelligible.

(18) Plotinus 3.9 [13] 1 (12-14)

So far as what is being said, nothing prevents the two being one, though divided in thought if only as being the one intelligible, the other intelligising. RRKS

But further resolution along these lines is attempted in 5.9 [5] 8 (8-20), already quoted, which in spite of having insisted that we must think of Being as prior (*proepinoein*), finishes by saying that Being and Intellect are both activities, and are one activity, and a single nature, and a unity. It is we who separate them and conceive of one as prior. Evidently, this is a deficiency of our thought. It further emerges from the passage that since thinking is the activity of Being and Beings, thinking is *in* the Beings, even though Beings are themselves within Intellect. So the interrelations are closer than one might at first have expected.

Porphyry had from the beginning made intelligibles prior to Intellect, in the course of his attempt, eventually abandoned, to put intelligibles outside the Intellect in opposition to Plotinus. Proclus demotes Intellect further by creating a triad of Being, Life and Intellect, in which Intellect has the third rank. Philoponus, however, repeats the identity claim about intellect and its objects, with no caveat about the priority of intelligibles, in *On Aristotle On the Intellect* 20,90-21,1, translated under **Psychology 3(k)**.

(19) Porphyry *Life of Plotinus* ch. 18, 10-11

That is why I even wrote an attack on [Plotinus] and tried to show that the object of intellectual thought existed outside the intellect. RRKS

(20) Proclus *in Tim.* 1.322,20-4

Of the early people some, like Plotinus, made the demiurgic Craftsman himself contain the Models of all [or universal: see Proclus *in Tim.* 1.310,15-29, translated in **Physics 8(e)**, and Jan Opsomer, London 2000] things, but others made it not him who contained them, saying either that the Model was prior to him, or that it was posterior: prior, like Porphyry, posterior like Longinus. RRKS

(21) Proclus *ET* 101, 90,17-19

All things which participate Intellect are preceded by the unparticipated Intellect, those which participate life by Life, and those which participate

being by Being; and of these three unparticipated principles Being is prior to Life and Life to Intellect. ERD

(22) Proclus *ET* 161, 140,21-7

And while the Intellect is an existent because of primal Being, this primal Being is itself separate from the Intellect, because Intellect is posterior to Being. Again, unparticipated terms subsist prior to the participated: so that prior to the Being which is consubstantial with the Intellect there must be a form of Being which exists in itself and beyond participation. For true Being is intelligible not as co-ordinate with the Intellect, but as perfecting it without loss of transcendence, in that it communicates to the Intellect the gift of being and fills it with a truly existent essence. ERD

Proclus further reports and approves a more elaborate scheme from Iamblichus which demotes the Demiurge of Plato's *Timaeus*, viewed as divine Intellect, not merely to the third member of a triad, but to a lowly triad below the triads of intelligibles and the triads of intellective-and-intelligible entities.

(23) Iamblichus *ap.* Proclum *in Tim.* 1.308,17-23

That Iamblichus himself celebrates the demiurgic order elsewhere more fully, even if he did so here in a rather general way, may be deduced from the account itself. For when writing *On the Address of Zeus in* [Plato's] *Timaeus*, [Iamblichus] allots to the Demiurge the third rank after the intelligible triads and the three triads of intellective <and intelligible> gods, within the seventh triad [reading: *hebdomêi triadi*, with Thomas Taylor and A.-J. Festugière; otherwise, if we read *hebdomadi* with the *mss.*, we have 'within the set of seven gods'], the intellective. HT and RRKS

(24) Proclus *PT* 5.13, 44,2-4 Saffrey-Westerink

Nor is it possible to situate the demiurgic cause at the first or second level of the Intellective Beings. JO

It may seem strange that Plotinus is attracted both by the identity and by the priority of intelligibles to Intellect. But Aristotle combines identity with priority, at least in the case of perceptibles and perception, whether or not of intelligibles and Intellect. The identity thesis, which starts with Aristotle, is an application of a general thesis about causality, which Aristotle lays out in *Physics* 3.3. The example there is that the activity of someone learning from a teacher is, in a sense, identical with the activity of the person teaching, and in general that of the agent is identical, though only numerically, with that of the patient. In *On the Soul* 3.2, Aristotle applies the identity thesis to perceptibles *qua* acting on the perceptual faculty and perception *qua* active. Here the perceptible is an agent acting as efficient cause in awakening the faculty, and so is, in a sense, prior to the resulting act of perception; yet this does not, for Aristotle, exclude its being identical with it. In *On the Soul* 3.8, intelligibles and Intellect are treated as a parallel case, although it is admit-

tedly less clear how far the parallel holds. Do intelligibles act, like perceptibles, as an efficient cause, or like objects of desire, as a final cause on the faculty? See **Psychology 3(n)**. Only in the latter case could they be intentional objects. And why, in any case, does Aristotle in *On the Soul* 3.5 name the Intellect, rather than the intelligibles, as the agent in this context? His final view on intelligibles, then, remains unclear, but he is committed to accepting that priority is compatible with the kind of restricted numerical identity that he introduces in *Physics* 3.3. See **Psychology 3(j)**.

Reading

A.H. Armstrong, 'The background to the doctrine "That the intelligibles are not outside the intellect" ', in *Les Sources de Plotin, Entretiens Fondation Hardt* 5, Geneva 1957, 393-425.

A.H. Armstrong, *The Architecture of the Intelligible Universe in the Philosophy of Plotinus*, Amsterdam 1967, 68-70; 74.

E.K. Emilsson, 'Cognition and its object', in Lloyd P. Gerson, ed., *The Cambridge Companion to Plotinus*, Cambridge 1996, ch. 9.

E.R. Dodds, ed., *Proclus. The Elements of Theology*, Oxford 1933, 252-3.

P. Hadot, 'Être, vie, pensée chez Plotin et avant Plotin', in *Les Sources de Plotin, Entretiens Fondation Hardt* 5, Geneva 1960, 105-41.

P. Hadot, 'La conception plotinienne de l'identité entre l'intellect et son objet', in G. Romeyer-Dherbey, ed., *Corps et âme. Sur le De anima d'Aristote*, Paris 1996, 367-76, repr. in P. Hadot, *Plotin, Porphyre. Études Néoplatoniciennes*, Paris 1999, 267-78.

A.C. Lloyd, 'Plotinus on the genesis of thought and existence', *Oxford Studies in Ancient Philosophy* 5, 1987, 155-86 at 181.

Jan Opsomer, 'Proclus on demiurgy and procession', in M.R. Wright, ed., *Essays on Plato's Timaeus*, London 2000, at 119-23.

G. Wald, *Self-Intellection and Identity in the Philosophy of Plotinus*, Peter Lang, Frankfurt am Main 1990, 38-63.

R.T. Wallis, *Neoplatonism*, London 1972, 55; 67; 124.

16. Consciousness Pervasive

The idea which Plotinus accepts and finds in Plato that (nearly) all beings in the universe, including the Platonic Forms, are conscious might be called a kind of Panpsychism. But it is compatible with the Realism about the objects of Intellect which has just been investigated.

Not only do the intelligible Forms of Plato think, but nature is a weak kind of soul, which also contemplates in order to produce bodies. Since two of the three hypostases, Soul and Intellect, also think, the universe is bursting with thought and life. In fact, life is found even in the One. The point can be illustrated in turn for the One, for the Forms and for Nature.

The One: the point applies to the One, for although it is beyond thinking, it too has life and a special kind of *katanoêsis* different from the thinking (*noêsis*) engaged in by Intellect.

(1) Plotinus 5.4 [7] 2 (12-19), translated under **13** above

Forms: the main Platonic text for the Forms thinking is the one mentioned above, *Sophist* 248E-249A, where it is said that what has complete Being (*to pantelôs on*) must have soul, life, thought (*phronein*) and intellect (*nous*). It further helps that the Form of all living things in *Timaeus* 39E is itself described as a living being (*zôion*).

Plotinus also cites at 5.3 [49] 5 (28-39) Aristotle's view, encountered under **13**, that actualised intellect is identical with the actualised object of thought. But he is right not to rely on it, for this identity is a very weak sort of identity. Aristotle means that there is only one activity going on between thinker and object, just as (on his view) between teacher and learner, *Physics* 3.3. But Aristotle explicitly warns that you must not infer that the teacher is learning (*Phys.* 3.3, 202b10). So it is not an inference Aristotle would himself have approved that the Forms as objects of thought are thinking. It is therefore just as well that Plotinus relies instead on Plato's *Sophist*.

Plato's *Sophist*, as briefly mentioned under **15(c)**, is taken differently by modern scholars. In the preceding lines a dialectical objection is raised against the Friends of the Forms that the Forms must at least undergo relative change, when someone changes his relation to them by coming to know them. It is answered that this is not a genuine case of the Forms being affected or changed (248E). The next objection, however, receives no answer. It is that what has complete Being must have soul, life, thought and intellect. The Neoplatonists not unreasonably take this as a further attempt to show that Forms undergo change, in this case mental change. Moderns seek to avoid this panpsychic result, for example by taking it that 'what has complete Being' is extended to include minds in addition to Forms and that it is only in virtue of *minds* that what has complete Being is conscious. Moderns are thus as ready as ancients to support a less obvious interpretation, in order to preserve their own presuppositions – in this case that Universals must be lifeless.

(2) Plato *Sophist* 248E6-249A8, translated under **15(c)** above

(3) Plotinus 5.3 [49] 5 (28-39)

But if thinking and its object are a unity, how does it follow (*pôs dia touto*) that the thinker will think itself? For the act of thinking may embrace, so to speak, its object or may be the same as it – but it is not yet clear that intellect thinks itself. The answer is: suppose thinking and its object are the same; for the intelligible is an activity, not a potentiality, something unintelligible, something lifeless: nor is life or thought introduced into something alien like a stone or some other lifeless thing; so the intelligible is primary Being. So if it is an activity, the foremost and finest activity, it will be the act of thinking (*noêsis*), essential thinking – for it is truest thinking. Such thinking, being primary, will also be primary Intellect in a primary way. BF

(4) Plotinus 5.5 [32] 1 (32-9)

Furthermore [the intelligibles] either have no sensation and are lacking in life and intelligence, or else they possess intelligence. If they do possess intelligence, then therein they possess both [life and intelligence] together; this is truth, and this is what primary Intellect is. It is there that we shall pursue our investigation about the nature of truth there: do Intellect and its object constitute a unity of identity and also a duality in differentiation? If so, how is this the case? But if they [the intelligibles] are without intelligence and life, what are they? For they are not premisses, or propositions, or things said (*protaseis*, *axiômata*, *lekta*). BF

This last passage goes on to conclude that to grasp an intelligible Form is not to grasp a proposition. Other passages which say that Being and the Forms are or have life or thought include 4.7 [2] 9 (23); 6.9 [9] 2 (24-5); 5.4 [7] 2 (43); 5.6 [24] 6 (20-4); 5.9 [5] 8 (16-20); 5.1 [10] 4 (5-10); 3.6 [26] 6 (10-32).

That intelligible things are all intellects is accepted by Philoponus, but rejected by 'Philoponus' *in DA* 3 in the following passages.

(5) Philoponus *On Aristotle On Intellect* Verbeke *CLCAG* p. 35, *ms.* 19-21

[But that] intelligible things which are separate from matter must be intellects is clear from this: if one is separate but not an intellect it will not understand either, and hence will exist to no avail as a functionless thing. WC

(6) 'Philoponus' *in DA* 527,32-528,6

We say that the conclusion does not follow, that every object of thought is intellect. For first, objects of intellect are either genuinely objects of intellect, such as those things which are altogether non-material, or not

genuinely, but in the way in which sense objects are said to be objects of intellect, such as a stone. The present discussion is about things that are genuinely objects of intellect. If that is so, things which are genuinely objects of intellect will be intellect, and nothing absurd will follow. Secondly, what really follows is not that every object of intellect is intellect, but that everything that thinks itself is intellect. For what does the problem say? 'By virtue of being intellect it is thought.' [Thought] by what? Clearly by itself. So, please, convert the whole proposition through 'that by virtue of which' and say: 'by virtue of being thought by itself it is intellect.' That is the healthy conversion. So if what is concluded from the conversion is not that that which is an object of intellect is intellect but that everything which is an object of intellect to itself is intellect, it is no longer the case that every object of thought is intellect. And Aristotle's solution does not please us, not only because of [what it implies about] the divine, but also because universals are objects of intellect but not intellects. WC

Nature: that all things, nature included, can create only by contemplating is explained in 3.8.1; 3-4; 7-8. Nature, plants, earth: all these contemplate (*theôrein*). Contemplation by earth and plants is first introduced as fanciful (*paizein*), but Plotinus goes on to argue in earnest, 3.8 [30] 8 (12-17), that all life is thought. Nature is a weak form of soul 3.8 [30] 4 (15), and it is by a dim form of contemplation that nature makes things. Indeed, all making is due to contemplation, 3.8.4 (40), whether dim or not. For earth soul, plant soul and attitudes of respect to the earth, see **Psychology 11(f)** and **(g)**.

(7) Plotinus 3.8 [30] 1 (1-7; 17-24)

Before entering into a serious discussion let us first indulge in a little fanciful (*paizein*) speculation, and suggest that all things desire contemplation (*theôria*) and look to this as their goal – not only rational beings but also irrational animals, the nature in plants and the earth that generates (*gennan*) them – and further that they succeed in so far as their nature allows them to, so that each thing in its own way contemplates and is successful, some reaching the true goal, others only an imitation or copy of it.

Let us now deal with the earth itself, trees and plants in general. What is their contemplation (*theôria*)? How are we to relate what the earth generates and creates to the activity of contemplation? How can Nature, which is said to be lacking imagination and reason, possess contemplation within itself? How can it produce what it produces through a contemplation which it does not possess? BF

(8) Plotinus 3.8 [30] 3-4

So how could [the rational forming principle in nature] have anything to do with contemplation (*theôria*) if it produces, and produces in this way?

The answer is that if it produces while enduring – that is to say, while

enduring within itself as a rational forming principle (*logos*) – it would itself be contemplation. For production could clearly only take place according to a rational forming principle if it were distinct from that rational forming principle, and the rational forming principle, in so far as it accompanies and oversees the production, would not be the act of production. So if it is not the act of production but a rational forming principle, it will be contemplation. The last phase of every rational forming principle is the result of contemplation and is contemplation in so far as it is the object of contemplation. But all that comes before that phase comprises either soul to the exclusion of Nature, or what is in Nature and is Nature.

[10] Is this itself derived from contemplation as well?

Yes, it is entirely derived from contemplation.

Is it from self-contemplation, then?

How else? For it is the outcome of contemplation, that is to say of something contemplating.

But how can Nature have contemplation? It certainly does not have the contemplation which comes from reason, by which I mean the rational consideration of its own contents.

Why not? It is a sort of life, a rational forming principle, a productive power.

[15] Is it because to consider is not yet to possess?

But it does possess, and because it possesses it also produces. So production comprises its being just what it is, and in so far as it is this, it is that which produces. It is both contemplation and an object of contemplation, since it is a rational forming principle. By being contemplation, an object of contemplation and a rational forming principle it produces, in that it is these three things. So its production has been revealed to us as contemplation. For it is the outcome of contemplation which is enduringly contemplation, engaging in no other pursuit, but producing by being contemplation.

[3.8.4] If somebody were to ask Nature why it produces, and if it were prepared to listen to the questioner and reply, it would say: 'You should not ask, but understand in silence, just as it is my practice to remain silent without speaking. What then are you to understand? That whatever comes into being is the object of my vision, itself an act of silence; it is an object of contemplation which comes naturally into being; I am Nature and I am derived from such contemplation; it is part of me to possess a vision-loving nature. The contemplative in me produces an object of contemplation, just as geometricians inscribe their figures as they contemplate. I do not inscribe, but I contemplate, and the outlines of corporeal beings emerge as if they fell from my contemplation. I share the experience of my mother and my begetters. For they too are derived from contemplation. My birth took place with no production on their part; they are higher rational forming principles which contemplate themselves – so I was born.'

[15] What does this mean?

It means that so-called Nature is soul, the child of a higher soul with a

more powerful life; being at peace it possesses within itself a contemplation which is directed neither above nor below; it remains stable where it is, and in its stability and so to speak self-awareness (*sunaisthêsis*) it saw what was posterior to itself through this consciousness and self-awareness, as far as it was able, and having gained a glorious and delightful vision it ceased its search.

[22] If one wishes to ascribe any understanding (*sunesis*) and perception to it, it is not the understanding and perception that we speak of in the case of other beings, but it is as if we were likening the understanding and perception of sleeping to those of wakefulness. For Nature is asleep, enjoying a contemplation of itself which comes to it because it endures in and with itself and is itself an object of contemplation; its contemplation is noiseless and somewhat dim, while there is another which is clearer to vision than it, of which it is an image (*eidôlon*). In this way whatever it begets is altogether weak, since weak contemplation produces a weak object of contemplation. For when men too show weakness in contemplation the actions they perform are mere shadows of contemplation and reason. Because their faculty of contemplation is inadequate through weakness of the soul, they are unable to embrace the vision adequately, and consequently lack fulfilment, although they desire to see. They are swept into activity in their desire to see what they are unable to achieve by intellect. So when they act, they themselves wish to see the result of their actions, and they want others too to view and perceive it, whenever the result matches the intention as best it can.

[39] On every occasion we shall find that action and production are a weakening or a consequence of contemplation – a weakening of it if one has no object beyond the completion of the action, and a consequence if one has something nobler than this to contemplate. For if one can contemplate the reality, why would one pursue for preference the counterfeit? Even duller children bear witness to this; having little aptitude for theoretical study they have recourse to practical activities. BF

(9) Plotinus 3.8 [30] 7

The following points are evident.

All things that have real Being are derived from contemplation and are contemplation. All things that come into being as a result of their contemplation are themselves objects of contemplation, some through perception, some through knowledge or opinion. Actions have knowledge as their goal. Yearning is for knowledge. What is engendered by contemplation aims at the perfection of a form (*eidos*), which is itself a further object of contemplation. In general all of these are imitations of what produce them and themselves produce objects of contemplation, forms. The entities (*hupostaseis*) that come into being are imitations of beings (*onta*) and reveal that what produces a product has as its goal not the act of production and creation, but the perfected thing as an object of contemplation. This is what

our discursive thoughts (*dianoêseis*), and even before them our perceptions, whose goal is knowledge, desire to see. Even before these, Nature produces the object of contemplation, the rational forming principle (*logos*), within itself, by bringing to perfection another rational forming principle. Some of these points were self-evident, while others were prompted by the discussion.

[15] For this too is evident, that since the primary Beings exist in contemplation, everything else necessarily yearns for the same state, because for everything the starting point is the goal. For when animals reproduce themselves the rational forming principles within them move them; this is the actualisation of contemplation, the labour of giving birth to many forms, many objects of contemplation, filling everything with rational forming principles, as if in eternal contemplation. For to cause something to exist is to produce a form, and that is to fill everything with contemplation.

[23] Any imperfection in what comes into being or in what is done is the result of a deviation from the object of contemplation on the part of the contemplator. To produce inferior forms is to be like a poor craftsman.

Lovers too can be counted among those who have a vision and hasten on towards the form. BF

(10) Plotinus 3.8 [30] 8 (12-17)

So if an object of contemplation or thought is to be alive, it must enjoy a life that is life itself, not one that is vegetative or perceptive or psychic in any other way. For these other forms of life are in a way thoughts (*noêseis*), but they are either vegetative or perceptive or psychic thoughts.

How can they be thoughts?

Because they are rational forming principles. All life is in a way thought, and like life, thought has varying degrees of unclarity. BF

Reading

John N. Deck, *Nature, Contemplation and the One*, Toronto 1967.

P. Hadot, 'Être, vie, pensée chez Plotin et avant Plotin', in *Les sources du Plotin, Entretiens Fondation Hardt* 5, Geneva 1960, 105-41.

17. The Unity of Minds

Some of Plotinus' remarks tend toward suggesting that, at the level of the intelligible world, there is a unity of all selves, souls and intellects. For at that level many different statements of identity or identifications hold true. They draw on Aristotle's idea that an immaterial thinker is, in a certain sense, identical with the object of thought, and also on Plato's remarks in *Sophist* 248E-249A which are taken to mean that the Forms are not only objects of thought, but also think. Relevant identifications in Plotinus are, first, that our true self is described not only as being discursive reason, but also sometimes (see under **18(a)(ii)**) as being the intellect above that. Secondly (**17(a)**) we are the intelligibles (the Platonic Forms), and our souls are all things and always have been. Thirdly, we and our souls can become Intellect (**17(b)**) and can be united with the One above that in mystical experience (**17(c)**) and sometimes becoming Intellect is described, 4.8 [6] 1 (1-11), as if it were becoming conscious of what is already the case. Fourthly, all souls are, in a way, one with each other (**17(d)**) and so are (**17(e)**) all intellects one with each other.

In the great Averroist controversy of the thirteenth century, Thomas Aquinas rejected the view of Averroes in his *Long Commentary on On the Soul* that all intellects are one, which seemed to threaten the Christian belief in individual immortality for the rational soul. But the belief in the unity of all intellects did not spring out of nowhere. We shall see in **17** and **18** that it was a possibility endemic in Platonism from the start. Plato's account of the true self as intellect in the *First Alcibiades*, translated under **18(a)(ii)**, already makes the true self look impersonal. Plotinus 4.1 [21] (5-9) (= 4.2 Armstrong), and Themistius *in DA* 104,14-23, both translated under **17(e)**, agree that the problem of unity is more acute for intellects than for souls. Aquinas drew on Themistius, but saw him as, unlike Averroes, avoiding the unity of all intellect.

Reading

Richard Sorabji, 'Is the true self an individual in the Platonist tradition?', in M.O. Goulet-Cazé, ed., *Le Commentaire entre tradition et innovation*, Paris 2000, 293-9.

Marc Geoffroy, Carlos Steel, *Averroès, La béatitude de l'âme*, Paris 2001.

17(a) We and our soul are the intelligibles, are all things

This has always been so, and when the soul is in the intelligible world, and hence united with Intellect, we experience the fact. Carlos Steel has pointed out to me that the first text below emphasises that, since others, as well as we, are all things, we are all together (*homou*).

(1) Plotinus 6.5 [23] 7 (4-8)

So if we partake in true scientific knowledge (*epistêmê*) we are those Beings; we do not enclose them within ourselves, for we are within them.

17(a) We and our soul are the intelligibles, are all things

Since others, not just ourselves (*ou monon hêmôn*), are those things, we are all those Beings. Together with all others (*homou meta pantôn*), we are those things. So we are at one with all things in a unity. BF

(2) Plotinus 6.5 [23] 12 (19-21)

You have become all, and yet even before you were all. But because something else was added to you after the 'all', you became less by addition. RRKS

(3) Plotinus 6.7 [38] 6 (23)

[The soul] was all things, but is active according to [its incarnation in] different creatures at different times. BF

(4) Plotinus 3.4 [15] 3 (22)

Each of us is an intelligible world. BF

(5) Plotinus 3.2 [47] 14 (15-20)

The entire higher world is the totality of all things, but none of the entities in the lower world is a totality. An individual man, in so far as he is a part of mankind, is not the totality of mankind. But if there is anywhere among the parts anything which is not one of those parts, then it is thereby a totality. But an individual man, as an individual, should not be required to have climbed to the peak of virtue. For then he would no longer be a part. BF

(6) Plotinus 4.4 [28] 2 (3-32)

In the light of this you should remember that even when you are contemplating with particular clarity in this world you are not turning in (*epistrephein*) on yourself in intellection; rather while you are in possession of yourself, your activity is directed towards its object – you become that object by offering yourself as its matter, so to speak, being shaped in accordance with the object of your vision, all the time being yourself in potentiality.

[8] Q: So what are you in actuality when you are thinking no thoughts?

A: Unless if you are just yourself when you are thinking no thoughts you are void of everything; but if you are yourself in the sense of being all things, when you think yourself you are thinking all things together. Consequently anyone in this guise viewing himself by means of an intuition (*epibolê*) and activity directed towards himself includes everything; and by his application directed towards everything he includes himself.

[14] Q: But if he does this, he is changing his thoughts – which previously we could not accept.

A: Unless we should say that Intellect is unchanging, but that change can take place in the soul, which lies as it were on the boundary of the intelligible world, since it can proceed inwards. For if anything lines itself up with what is static it must itself change relative to the fixed point by itself not remaining static.

In fact we should not really call it a change when anyone turns from his own concerns to himself, or vice versa. For he is all things, and together they comprise a unity.

[22] Q: But when the soul is in the intelligible world, is it not affected in that it has changing dispositions towards itself and its concerns?

A: No: when it enjoys the purity of the intelligible world it too is unchanging. For it is all that it is. For when it is in that world it must become one with Intellect, since it has turned in (*epistrephein*) towards it, and once it has turned nothing comes between them; once it has joined Intellect it is in concord; and once it is in concord it is united but not overwhelmed – they are a duality in unity. So when it is in this state the soul cannot change, but is unalterable in its intellection, enjoying at the same time self-awareness. For it has come to be at one with the intelligible. BF

(7) Plotinus 4.3 [27] 8 (12-16)

It was said that all souls are all things, but that the individual soul is to be viewed in terms of what is active in it, i.e. one achieves unity in activity, another in knowledge, another in desire; each looks to different objectives and is and becomes what it looks to. BF

(8) Plotinus 4.7 [2] 10 (35-6)

[He will see an intellect] that has itself become an intelligible world and full of light. RRKS

The soul contains all the forming principles (*logoi*) there are.

(9) Plotinus 5.7 [18] 1 (9-10)

We do claim that each soul possesses all the rational forming principles (*logoi*) that the universe possesses. BF

17(b) Becoming Intellect

On Aristotle's principles, an intellect is identical with the object of its thought (as seen under **13**). So Alexander can say that our intellect becomes the divine Intellect by thinking it.

(1) Alexander *DA* 89,21-90,2

When [our material] intellect thinks [the productive] intellect, it somehow becomes that intellect, at least if thinking consists in taking the form that is being thought and getting assimilated to it, by analogy with scientific understanding, which, when active, is what it contemplates on each occasion. RRKS

Plotinus exploits this idea, but with differences. Although the highest part of us is an undescended soul uninterruptedly contemplating intelligibles, Plotinus also sometimes says (see under **18(a)(ii)** 4.7 [2] 10 (30-54); 6.4 [22] 14 (16-31)) that we are intellect. Moreover, when the soul is in the intelligible world, it becomes the divine Intellect by turning to it, and looking towards or at it.

(2) Plotinus 4.4 [28] 2 (25-7), translated under **17(a)** above

(3) Plotinus 1.2 [19] 4 (25-7)

Perhaps the situation is the following: Intellect is not alien to the soul, especially when the soul is looking towards it. Otherwise, even though Intellect is present to the soul, it is alien. BF

(4) Plotinus 5.3 [49] 4 (24-30)

Q: Shall we, using some other power [than Intellect], see that Intellect knows itself? Or shall we know Intellect and ourselves by taking it in, since it belongs to us and we to it?

A: Yes, for this is necessary if we are to know just what self-knowledge in Intellect is. A man becomes Intellect himself when he rejects his other concerns and looks towards Intellect through Intellect, viz. looks towards himself through himself. So it is as Intellect that he sees himself. BF

Our soul's becoming Intellect can be experienced as a mystical union and union with Intellect is probably what Plotinus describes autobiographically as a personal experience. The experience shows the soul as it really is, so that it seems a mystery how it ever got embodied. On one interpretation, the passage sees this becoming Intellect as merely becoming conscious of what is already the case. If so, this reinforces the idea of the unity of minds.

(5) Plotinus 4.8 [6] 1 (1-11)

I have often woken out of my body to myself, withdrawing from everything else into myself. How great and miraculous a beauty have I seen! It is then more than ever that I believe that I belong to the nobler world, that I live the best life of pure actuality, becoming at one with the divine and resting in it; I reach that state of actuality by setting myself above everything else in the intelligible world. But after resting in the divine in this way I descend from pure intellection to discursive reasoning, and wonder why I

am now descending, and how my soul, which despite its presence in the body is revealed as the pure being that it is, ever entered the body. BF

The experience involves a loss of any sense of where one's own boundaries stop and those of the Intellect begin.

(6) Plotinus 6.5 [23] 7 (13-17)

At first he will not see [god, himself and the universe] as a whole; then, not knowing where to come to a halt and demarcate himself (*hauton*), and not knowing the boundaries (*mekhri tinos)* of his own self (*hauton*), he will cease to mark himself (*hauton*) off from the whole of Being and will join the entirety of the All – not going forward but remaining where the All has its place. BF

One regards the Intellect as being oneself and the two become one. The undescended soul which sees Intellect is sometimes called the soul's intellect.

(7) Plotinus 5.8 [31] 10 (39-43)

But one must transfer into oneself what one looks at, and must look at it as one and as oneself, as if someone possessed by god, taken over by Phoebus or one of the Muses, were to seek his vision of the god within himself if he had the power to observe god within himself. BF

(8) Plotinus 6.7 [38] 35 (34-6)

Rather, the soul's intellect sees first and the vision comes to it too and the two become one. RRKS

Another description is that there is nothing in between (4.4 [28] 2 (27-8), as above, **17(a)**), but this is sometimes used only to make the weaker point that soul and Intellect are successive hypostases or levels of reality, in Aristotle's sense of 'successive', viz. that there is nothing of the same kind, i.e. no further hypostasis, in between (5.1 [10] 3 (21)).

There is a man above the rational power of the soul who can become Intellect, by looking at Intellect and letting everything else go. But in seeing himself as Intellect, he sees himself no longer as man, but as other.

(9) Plotinus 5.3 [49] 4 (7-13), translated under **18(a)(ii)** below

(10) Plotinus 5.3 [49] 4 (24-30), translated as text (4) above

The soul has first to become Intellect before it can aspire to union with the highest divinity, the One.

(11) Plotinus 6.7 [38] 35 (4-7)

[Soul] contemplates by becoming Intellect, by being as it were made

intelligible and living in the intelligible world; having arrived there and living there it possesses the intelligible, it thinks; but when it sees that god [the One], it discards everything else. BF

In becoming united with intellect, Socrates and his soul are not destroyed. Soul and intellect are one and two.

(12) Plotinus 4.4 [28] 2 (28-9)

Once it has joined Intellect it is in concord; and once it is in concord it is united but not overwhelmed – they are a duality in unity. BF

(13) Plotinus 4.3 [27] 5 (1-14)

Q: But in what way will your [soul] or this man's [soul] or another man's [soul] still exist? Is it the case that the lower phase belongs to the individual person, but that the higher soul belongs to the totality of soul? If so, then there will be a Socrates as long as Socrates' soul is in his body, but he will perish when it goes to the better world.

[5] A: The answer is that none of the real Beings perish; for in that world Intellects do not perish into a unity, because they are not divided as bodies are, but each remains in a state of difference (*heterotês*), possessing sameness of being. So in this way souls too at each stage depend on each stage of Intellect; they are rational forming principles (*logoi*) in intellects, but are more unfolded than them – a plurality growing out of a paucity. They are in contact with that paucity through the less divided aspect of each of them. But although they now yearn for division they are unable to proceed to ultimate division, since they preserve both sameness and difference; each soul remains a unity, yet all souls together comprise a unity. BF

Yet even below the intelligible world, when our intellection is directed to an object, one does not turn to oneself, but to it, so that although one possesses oneself, one is oneself only potentially.

(14) Plotinus 4.4 [28] 2 (3-8)

In the light of this you should remember that even when you are contemplating with particular clarity in this world you are not turning in (*epistrephein*) on yourself in intellection; rather you are in possession of yourself, while your activity is directed towards its object – you become that object by offering yourself as its matter, so to speak, being shaped in accordance with the object of your vision, all the time being yourself in potentiality. BF

Reading
See under **17(c)**

17(c) Union with the One

Mystical union with the highest divinity, the One, is described in terms of being united, or being one with, or of two becoming one (6.7 [38] 34 (13); 6.9 [9] 10 (12-22); 6.9.11 (4-7); 5.5 [32] 8 (21)), of communion such as bodies cannot enjoy (*koinônia*), 6.9.8 (30)), of being present (5.3 [49] 17 (30); 6.7.34 (14); 6.9.4 (3); 6.9.7 (4); 6.9.8 (28-35)), of being together (6.9.3 (11-12); 6.9.7 (21-3); 6.9.10 (10)); of there being nothing in between, a state imitated by lovers (6.7.34 (13)), of wanting to be mingled (1.6 [1] 7 (13)), of there being no difference (6.9.3 (13); 6.9.8 (31-3); 6.9.10 (20-1); 6.9.11 (9)); of two centres coinciding (6.9.8 (19-31); 6.9.10 (7-21)), of regarding the One as an internal possession, rather than external (5.5 [32] 7 (23-35); 5.8 [31] 10 (36-45); 5.8.11 (13-22)).

The experience of union with the One is enjoyed by our intellect, not by our intellect in its right mind, but in love and drunk with nectar. The soul is then neither soul nor intellect.

(1) Plotinus 6.7 [38] 35 (19-45)

Intellect then has one power of thought with which it observes its own contents, and another with which it looks to what transcends it by a sort of apprehension and acceptance, by which initially it merely sees – but later by its vision it possesses true intellect and is at one with it. The former is the sight belonging to Intellect in its right mind, the latter is Intellect in love, when it becomes 'drunk on nectar [Plato *Symposium* 203B5]'; then it becomes a lover, reaching in its fulfilment a simplicity of well-being. It is better for it to be drunk than to be too aloof for such inebriation.

[27] Q: But is such Intellect partial, viewing now one thing and now another?

A: No: it is the rational formulation that by explication produces the world of becoming. Intellect can both think eternally and also observe the One without thinking. For seeing the One it possesses offspring, and is aware that they have been produced yet are still in its womb; this awareness is called intellection, while its awareness of the One is due to the power that eventually becomes that by thought.

[33] The soul as it were confuses and obliterates the intellect within itself; or rather its intellect first of all sees, and then this vision comes to the soul and the two become one. The Good, spread over them and in harmony with this compound, is swift to unite them, set over them and giving them 'blessed sensation and vision [Plato *Phaedrus* 250B6-7]'; it lifts them so high that they are no longer in place or in the world of differentiation where one thing can be in another. For the One is not anywhere; 'intelligible place [Plato *Rep.* 508C1; 517B5]' is in it while it is not contained by anything else.

That is why the soul is not then moved – since the One is not moved. So it is no longer soul, since the One is not alive, but above life; nor is it Intellect, since the One does not think, and soul must be assimilated [to that]. Nor does it even think that, since it does not think. BF

One regards oneself as being a god. The soul has not perished and has run not into something alien, but into itself.

(2) Plotinus 6.9 [9] 9 (57-9)

[We are] pure light itself, weightless; we have become god, or rather we are god, ablaze. BF

(3) Plotinus 6.4 [22] 16 (44-7)

When the soul illuminates itself, by its upward inclination it is concentrated on the whole, and does not exist in actuality – nor does it perish. BF

(4) Plotinus 6.9 [9] 11 (38-9)

When it speeds along the opposite path it does not come to something alien, but to itself. BF

On the other hand, the soul does not then exist actually, it is neither soul nor intellect. There is no reasoning, nor thought, nor entirely a self. One is out of oneself and has become as it were someone else and not oneself. The soul has no leisure to see what it is.

(5) Plotinus 6.4 [22] 16 (44-7), translated as text (3) above

(6) Plotinus 6.7 [38] 35 (42-5), translated as text (1) above

(7) Plotinus 6.7 [38] 34 (16-21)

[The soul] is no longer aware of the body – of its presence in it – nor does it give itself any alien name such as 'man', 'living creature', 'entity', or 'a whole'; for any vision of these would be disturbing; it has no time or wish for them, but in its search for the One it meets it face to face and gazes on it rather than itself. It does not even have the time to see who it is that is gazing. BF

(8) Plotinus 6.9 [9] 11 (11-12; 22-3)

There is then [on assimilation to the One] no reasoning, no thought, nor entirely a self (*autos*).

There is perhaps nothing seen, but it is another mode of seeing. BF

(9) Plotinus 6.9 [9] 10 (14-21)

Then the person seeing does not see or distinguish or envisage two things, but almost becomes someone else, there no longer himself or belonging to himself. He belongs to the One, a unity, like someone superimposing the centres of concentric circles. Even in this world they are something single

when they come together, but are two when taken separately. It is in this sense that we now call the One something separate, and that is why the vision is hard to describe; for how could you describe what, in your contemplation of that world, you have not seen as something separate, but as one with yourself? BF

Reading

A.H. Armstrong, 'Elements in the thought of Plotinus at variance with classical intellectualism', *Journal of Hellenic Studies* 93, 1973, 13-22.
R. Arnou, *Le Désir de Dieu dans la philosophie de Plotin*, Paris 1921.

17(d) Are all souls one with each other and is soul indivisible?

Plato *Timaeus* 35A1-6 described soul as a mixture of what is indivisible and what is divisible amongst bodies. Plotinus allows that the divisibility is not because of, but prior to, the bodies, 6.4 [22] 4 (37-9), as Porphyry repeats, *Sentences* 37, first sentence. But it is the indivisibility of soul that Plotinus often stresses. Even for embodied souls, the indivisibility and unity of soul is shown by the facts of sympathy, love, and magic spells, 4.9 [8] 3 (1-16), cf. Themistius on intellect, *in DA* 103-4 in **17(e)**. And within a single body, the whole soul is present undivided in every part, 4.9 [8] 1 (1-13); 6.4 [22] 4 (27-34). Although soul is described as being of a nature to be divided, 4.1 [21] (7-9) (Armstrong 4.2), that is only by comparison with Intellect. And the clarification is offered that there is some soul which is not of a nature to be divided (13), presumably the undescended soul. More than that, 6.4 [22] 4 (27-8), even the soul that is divided amongst bodies is by *nature* indivisible. Further evidence of the unity of souls is that time exists in souls and could not be unitary unless there was a unity of soul, 3.7 [45] 13 (66-8). On the other hand, that there is a plurality of souls is shown by the fact that Plotinus is keen to insist that our souls are not parts of the World Soul which makes the stars revolve, but that that is a sister soul derived (*ek, apo*, 4.3 [27] 5 (15); 4.3 [27] 8 (2-3)), like ours, from the hypostasis soul (4.3 [27] from 1 to 8). The human and world souls can be called 'parts' of the hypostasis soul only in the special sense in which theorems, though *derived from* a whole system, can also be called *parts* of it, 4.3 [27] 2 (49-54), translated under **18(d)** below.

(1) Plato *Timaeus* 35A1-6

From the Being that is indivisible and always in the same state, and in turn the Being that becomes divisible amongst (*peri*) bodies, from both of these he mixed together a third intermediate kind of being. And from the nature of the Same and that of the Different he made a similar construction, intermediate between that part of them which is indivisible and that part which is divisible over (*kata*) bodies. RW

(2) Plotinus 4.1 [21] Henry-Schwyzer (Armstrong 4.2)

True substance is to be found in the intelligible world. Its finest inhabitant is Intellect, but souls are there too; for that world is the origin of soul in this world. That world contains souls without bodies, whereas this world

is the place of souls which have come into being in bodies and which are divided amongst bodies. There Intellect is found all together in its entirety, not distinguished or divided, and there all souls exist together in a world of eternity, not of spatial extension. So Intellect is always (*aei*) without distinction or division, just as soul is there (*ekei*, sc. in the intelligible world) without distinction or division – although its nature is to be divided. For its division means divorce [from Intellect] and coming into being in bodies. Therefore it is quite reasonable to call soul 'divisible amongst bodies' [Plato *Tim.* 35A1-6] because it is divorced and divided in this way.

[12] Q: So how is it also indivisible?

A: Well, it is not divorced in its entirety, but there is a part of it which remained, the part whose nature is not such as to be divided. So to say [that the soul is compounded] 'from what is indivisible and from what is divisible amongst bodies' is the same as saying that it is compounded from the soul which is in the intelligible world and from the soul which depends on that, but which has overflowed into this world, as a radius flows out from the centre of a circle. When it has arrived here it gains its vision by means of the same part by which it retains the nature of the whole. For even here it is not only divided but also undivided. For the divided part of it is indivisibly divided; for it gives itself to the whole body and is not divided, because it is divided as a whole over (*eis*) the whole body, by being in all of it. BF

(3) Plotinus 4.9 [8] 1 (1-13)

We claim that the soul of the individual (*hekastos*) is one because it is present in its entirety throughout the body; in this way it is truly one, and does not present different parts of itself in different parts of the body; this is how the sensitive soul is present in creatures with sensation, just as in a plant the vegetative soul is present in its entirety throughout, in every part. Is it similarly the case that your soul, and my soul, and every soul is one? And in the universe is it true that the soul in all things is one, not divided as in a magnitude, but everywhere the same? For how could my soul be one, but the soul in the universe not be one? For there is no magnitude or body in that case. So if your soul and my soul are derived from the soul of the universe, and if its soul is one, then they must be one too. And if the soul of the universe and my soul are in turn derived from one [hypostasis] soul, again all souls are one. BF

(4) Plotinus 4.9 [8] 3 (1-16)

In fact from a different viewpoint the account tells us that we are in sympathy with each other and that we share someone's pain and elation just from seeing them, and that we are naturally attracted into a loving relationship – perhaps this is the very cause of love. If spells and other wizardry draw us together and put us in sympathy with each other at a distance, then this is unequivocally caused by the one soul. A word quietly

spoken has often influenced something distant and caused something enormously far away to pay attention. From this fact we can perceive the unity of all things, since their soul is one.

[10] Q: So how can it be the case that, if the soul is one, there is a rational and an irrational and a vegetative soul?

A: The answer is that the undivided part of it must be ranked as rational because it is not divided over [*en*] bodies [Plato *Timaeus* 35A1-6], while the part that is divided amongst bodies, although it is one and the same, is divided amongst bodies, and must be considered to produce sensation throughout as one of its powers; its ability to create and form bodies is another power. BF

(5) Plotinus 4.9 [8] 5 (1-7)

How can there be a single essence in many [souls]? For either the single soul is found in its entirety in all things, or else the many souls are derived from a whole and single soul which remains unchanged. So that soul is a unity, and the many can be traced back to it as a unity which gives itself – yet fails to give itself – to a plurality. For it is capable of offering itself to all things while remaining a unity, since its power is directed to all things at the same time and it is not completely severed from any one thing. So it is the same in all things. BF

(6) Plotinus 3.7 [45] 13 (66-8)

Is time within us?

Yes, it is in every such soul, and in the same form in every soul, and all souls are one, which is why time will not be fragmented. RRKS

(7) Plotinus 6.4 [22] 4 (1-3; 27-34; 37-9)

In what sense [does Plato posit] Being, Beings, many Intellects and many souls, if Being is everywhere one and not merely a similar in form (*homoeidês*), and if Intellect and soul are both unities?

That which is divisible amongst bodies [Plato *Timaeus* 35A1-6] is said to be indivisible by its nature, while bodies have size; this soul's nature is present to them – or rather bodies come to be with soul – and in so far as they are divided the soul's nature is imaged in every part; it is in this way that soul is thought to be divisible amongst bodies. For it is not distributed together with the parts, but is present everywhere in its entirety. The unity and real indivisibility of its nature is made clear by this. BF

One should not think that the multiplicity of souls comes about on account of the extension of body; even before bodies, souls are many and one. RRKS

(8) Plotinus 6.4 [22] 14 (1-22)

Q: But if the soul is everywhere the same, how can there be a soul particular to each individual? And how can one soul be good, and another evil?

A: The answer is that it is sufficient for each individual and at the same time contains all soul and all intellects. For it is a unity and yet infinite, and it contains 'all things together' yet each thing in distinction although not separately. For why else should it be called infinite, if not because it contains 'all things together' – all life, all soul, all Intellect. None of these is marked off by boundaries – which is why it is a unity. For it must not have one single life, but infinite life – yet still one life, and one life in the sense that it contains all lives together, not bundled together into a unity, but originating from a unity and residing in that origin; rather, they did not originate from it but have always been so, since nothing comes into being in that world; so there is no division – it merely seems to be divided by what receives it.

[12] Or rather [these lives] did not begin, but [Being] has always been so; for nothing comes into being in that world; so it is not divided but only appears to the recipient to be divided. The world there is ancient and primordial, while this world of becoming approaches it, appears to come into contact with it, and is dependent on it.

[16] Q: And we – what are we? Are we the ancient and primordial, or that which approaches it, something that comes to be in time?

A: The answer is that before the birth of becoming we existed there, men of a different order – some of us even gods – pure souls, Intellect engaged with the totality of Being, inhabitants of the intelligible world, not isolated and cut off but parts of the whole. For not even in our present state are we cut off. BF

(9) Plotinus 4.3 [27] 5 (14-18)

A summary of the argument has been given, that souls are derived from a single soul; the many souls that are derived from it are divided and not divided – just as is the case with Intellect; the soul that remains above is the single forming principle of Intellect, and from it originate divided and immaterial forming principles (*logoi*), just as with Intellect. BF

(10) Plotinus 4.9 [8] 2 (24-8)

Nor do we claim that the soul is one in the sense that it is entirely devoid of plurality – that can only be granted to a superior nature – but that it is one and many, sharing in 'the nature that is divisible amongst bodies [Plato *Timaeus* 35A1-6]' but also in 'what remains undivided' – so that again it is one. BF

Reading

H.J. Blumenthal, 'Soul, World-Soul and individual soul', in *Le Néoplatonisme*, CNRS, Paris 1971, 55-63.

Stephen Clark, 'Plotinus: body and soul', in Lloyd P. Gerson, ed., *The Cambridge Companion to Plotinus*, Cambridge 1996, ch. 11, 185-8.

E. Emilsson, 'Platonic soul-body dualism', *Aufstieg und Niedergang der römischen Welt* 2.36.7, 5331-61, at 5352-3.

Paul Kalligas, 'Forms of individuals in Plotinus: a re-examination', *Phronesis* 42, 1997, 206-27.

Gerard O'Daly, *Plotinus' Philosophy of the Self*, Shannon 1973, 24-5.

Porphyry agrees with Plotinus, in a text which comments on Plotinus 6.4, that souls are both many and one, although in souls Sameness prevails over Difference (*heterotês*) which is not further analysed. The division of souls is connected with their infinity of powers and with plain Difference.

(11) Porphyry *Sentences* 37, 42,13-45,9 Lamberz

One should not think that it is by reason of the multiplicity of bodies that the multiplicity of souls has come about, but rather that it is prior to bodies [cf. Plotinus 6.4 [22] 4 (37-9)] that souls are both many and one, with the single universal soul not preventing the existence of many souls within it, and the many not effecting a partition of the single soul between them. For they distinguish themselves without cutting themselves off, nor fragmenting the universal soul into themselves, and they are present to each other without confusion, nor by making the universal a mere conglomeration; for they are not divided from one another by boundaries, nor, again, are they blended with one another, even as the many items of knowledge are not blended together in a single soul, and, again, are not merely juxtaposed in the soul like bodies, maintaining a distinction of substance, but they are qualitatively distinct activities of the soul.

[43,9] For the nature of the soul is endowed with infinite power, and in any part of it taken individually is still soul, and all are one, and, again, the whole is distinct from all. For even as bodies, when infinitely divided, do not end up as incorporeal, since their divisions produce their distinctions in respect of volume, so the soul, being itself a form of being endowed with life, is divided [reading: *dieilêptai*] even to infinity into its forms, containing all their specific variations and being present as a whole with them, and also without them; for what may be termed division in its [the soul's] case is really just difference (*heterotês*), with the sameness remaining as well. If, after all, in the case of bodies, amongst which difference dominates rather than sameness, nothing incorporeal intervenes to split up their unity, but all remain united in their essence, but are distinguished in respect of their qualities and other types of characteristic, what are we to say and think about specifically incorporeal life, in which sameness prevails above difference and there is nothing underlying as substratum of another nature than the form – an entity, indeed, from which unity actually comes to be in bodies – and where no body, falling in with it, can break up

its unity, despite in many respects hindering its activities? All on its own, its sameness performs and discovers everything by virtue of its formative activity, extending as it does to infinity, with any and every part having the potency of all when it is free of the body, even as any and every part of a seed possesses the potency of the whole seed.

[44,16] And even as a seed, when possessed by matter, is dominated in all the parts of the matter in accordance with each of the rational principles (*logoi*) of which it contains the potentiality, and again, when, drawn together into the power of the seed, it has its whole power in each of its parts, even so that which is thought of as a part of an immaterial soul possesses the power of the whole soul. That aspect which is inclined towards matter is dominated by it insofar as, in its capacity as a form which has inclined, it has adapted itself to consort with what is material, but it contains nonetheless the power of the whole, and encounters it as existent within itself, whenever it abstracts itself from the material and comes to be in itself. And since, in its declination towards matter, it experiences deprivation of everything and nullification of its proper power, whereas when it is elevated towards intellect it discovers its fullness in virtue of possessing the power of its totality, those who first recognised the experience which the soul undergoes, expressing themselves riddlingly, reasonably called the one aspect of it Poverty, and the other Resource. JD

The Manichaeans are cited by Nemesius in a text drawing on Porphyry as making individual souls to be divisions of the one soul of the Universe, a view attacked by Plotinus in 4.3 [27] 1-8.

(12) Nemesius *On the Nature of Man* 2, 17,10-14 Morani

Furthermore some have thought that the soul of all things was one and the same, divided up among individuals and again coming together within itself, as do the Manichaeans and certain others, some that they are many and different in kind, some that they are both one and many. JOU

(13) Nemesius *On the Nature of Man* 2, 32,20-33,19 Morani

Next let us examine also the belief that the Manichaeans have about the soul. They say that it is immortal and incorporeal, but that there is only one, the soul of the universe, which is chopped up and divided into individual bodies, both inanimate and animate, and that the latter have a greater, the former a lesser share. The animate have more, the inanimate have less, heavenly beings have much more, so that the souls of individual things are parts of the universal soul. If they said that this is shared out without being divided, as a voice is to those who hear it, the harm would have been moderate; but as it is they say that the very substance of the soul is shared out, and, most difficult of all, because they claim that it is properly in the elements, it is divided out with them in the birth of bodies,

and comes together again when bodies decay, like water which is divided out and collected again and mixed. They say that pure souls turn towards light, being themselves light, but those tainted by matter go into the elements and again from elements into plants and animals. They thus divide up the soul's substance and depict it as corporeal, and subject it to being affected, but say that it is immortal. But they actually fall into contradictions. For while saying that tainted souls revert to elements and are mixed together with each other, they still say that they are punished in reincarnations according to the greatness of their sins, unifying them and again separating them in their existence. For they say that shadows in the light are separate, but are unified when it becomes dark, which could not happen in the case of an intelligible nature. For shadows are also among perceptible things, even if one were to allow that they are separated and again united. JOU

Augustine takes up the options considered by Plotinus and Porphyry, without making a decision, that soul is one, or many, or one and many. Pépin considers that Porphyry may be Augustine's source.

(14) Augustine *de Quantitate Animae* 69 Hörmann *CSEL* 89

Now accept from me, if you wish, or rather, recognise through me, how great the soul is, not in extent of space and time, but in strength and power. For that task, if you remember, has been proposed and assigned by us already long ago. On the number of souls, however, I do not know what I should respond to you, even though you may have thought that that, too, pertains to the aforementioned question [i.e. concerning quantity]; for I would sooner say that this question is not to be asked at all, or that at least you should postpone it for now, rather than that number and multiplicity do not pertain to quantity or that I can immediately solve for you such a convoluted question. For if I say the soul is one, you will be perturbed; for in one it is happy, in another one unhappy, and nothing that is one can be at the same time happy and unhappy. And if I say it is at the same time one and many, you will laugh at me; and it is not easy for me to find means to suppress your laughter. But if I say they are all but multiple, I shall laugh at myself, and I shall put up with displeasing myself even less than with displeasing you. RRKS

Reading

P. Merlan, *Monopsychism, Mysticism, Metaconsciousness*, The Hague 1963.
Gerard O'Daly, *Augustine's Philosophy of Mind*, London 1987, 60-2.
Jean Pépin, 'Une nouvelle source de Saint Augustin. Le zêtêmata de Porphyre sur l'union de l'âme et des corps', *Revue des études anciennes* 66, 1944, 53-107 at 89-90.

Iamblichus in his *On the Soul* is opposed to the idea of unity of souls. He does not even accept that all souls are of the same kind, but maintains that animal soul is

radically different. The passages preserved by Stobaeus are translated under **Psychology 11(d)**.

17(e) Are all intellects one with each other and is Intellect indivisible?

Although Intellect is indivisible, it is, like soul in Plato *Timaeus* 35A1-6, both divisible and indivisible. But although there are individual intellects, Plotinus treats Intellect as less divisible than soul. For it is the *nature* of soul to be divided, and it is only in the intelligible world that it is indivisible, whereas intellect is described as *always* so. We thus see arising naturally out of Platonism the view which Albert the Great found in Averroes (references below) and Thomas Aquinas attacked, that all intellect is one. Themistius comments at *in DA* 104,14-23 in evident agreement with Plotinus 4.1 (4.2 Armstrong) that the question of unity arises more for intellect than for soul.

Themistius distinguishes at least three intellects, if we ignore his anomalous 'common intellect'. They are the potential (*dunamei*), actual (*energeiai*) and productive (*poiêtikos*). Confusingly, the last is also called actual (*energeiai*), and the Latin text of Themistius used by Thomas Aquinas, uses cognate Latin words for the actual and productive intellects (*actu*, *activus*), while Thomas speaks of the agent intellect (*agens*). Themistius denies Alexander's view that the productive intellect is God, *in DA* 102,36-103,19. For Aristotle it is said to be me, 101,9-15, cf. 100,37-101,1, while for Themistius the productive intellect provides the essence of me, 103,36-8, and the combination of potential and actual intellect is what he considers to be me, 100,16-22. These texts are translated below and in **18(a)**. The three intellects are said in 103,32-104,6 to illuminate each other in a metaphor echoing Plotinus' description of the three men who illuminate each other at 6.7 [38] 6 (10-19), translated below and in **18(a)**.

It is the productive intellect, 103,36, that is argued by Themistius, despite its immortality and humanness, to be unitary and therefore not a source of *individual* immortality. Themistius' grounds for its unitariness are the fact of human mutual understanding, 103,32-104,6; 104,14-23. Cf. Plotinus' appeal, 4.9 [8] 3 (1-16), to sympathy and magic, as evidence for unity at the lower level of soul, translated in **17(d)** above. 'Philoponus' canvasses the idea that the *actual* intellect of humans is immortal only through the succession of individual thinkers and Philoponus does the same for its non-intermittence, *in de Intellectu* 52,17-29; 91,40-9, both spelling out the implications of Themistius. What Averroes did was to apply to all of our intellect what they conceded about part of our intellect, viz. that it owes its immortality to the succession of mortal individual intellects. Thomas Aquinas appealed instead to Themistius' concession that the *illuminated* intellects were individual human intellects.

(1) Plotinus 4.1 [21] (5-9) Henry-Schwyzer (4.2 Armstrong)

There [in the intelligible world] Intellect is found all together in its entirety, not distinguished or divided, and there all souls exist together in a world of eternity, not of spatial extension. So Intellect is always (*aei*) without distinction or division, just as soul is there (*ekei*, sc. in the intelligible world) without distinction or division – although its nature is to be divided. BF

(2) Plotinus 4.3 [27] 5 (14-18), translated under **17(d)** above

(3) Plotinus 6.2 [43] 20 (4-23), translated under **18(d)** below

(4) Themistius *in DA* 104,14-23

The inquiry pursued by some [thinkers], more recent as well as earlier ones, into whether all souls are one, would be better conducted into whether all intellects are one. For while the soul may according to them be one and separate, still its capacities are multiple, and plainly distinct from one another (the capacity for nutrition from that for sense perception, and the latter from the capacity for desire). But in the case of the intellect, and above all the [intellect] that has a capacity for contemplation (*theôrêtikos*), the [answer to the] inquiry [into whether all souls are one] is necessarily entailed by admitting that in its case [sc. of the intellect] the essence is the same as the activity. For when one person teaches and another learns, either they do not think the same objects, or if they do think the same objects, then they have the same activity, and therefore also the [same] essence. RBT

(5) Themistius *in DA* 103,30-104,6

From what source will the potential intellect also come to think all objects, if the intellect that advances it to activity does not think all objects prior to it? Now [the solution is that] the intellect that illuminates (*ellampôn*) in a primary sense is one, while those that are illuminated (*ellampomenoi*) and illuminate (*ellampontes*) are, just like light, more than one. For while the sun is one, you could speak of light as in a sense divided among the organs of sight. That is why Aristotle introduced as a comparison not the sun but [its derivative] light, whereas Plato [introduced] the sun [itself], in that he makes it analogous to the good [*Republic* 502C-509C]. There is no need to be puzzled if we who are combined from the potential and the actual (*energeiai*) [intellects] are referred back to one productive (*poiêtikos*) intellect, and that what it is to be each of us is derived from that single [intellect]. Where otherwise do the notions that are shared (*koinai ennoiai*) come from? Where is the untaught and identical understanding of the primary definitions and primary axioms derived from? For we would not understand one another unless there were a single intellect that we all shared. And Plato's [statement at *Gorgias* 481C5-D1] is true. 'If there was not an [affection] that was identical, although individually different for different human beings, but instead any one of us was uniquely affected in comparison with other people, it would not be easy for that person to indicate to another how he was personally affected.' RBT

(6) 'Philoponus' *in DA 3*, 538,32-539,7

[538,32] And the third thing fits it, that intellect always thinks. Not, as

17(e) Are all intellects one with each other?

Plotinus believes, because the same intellect thinks always throughout everything, for we are not saying that the intellect which thinks always is one in number; but because in the whole cosmos there is always a human intellect thinking. Even if I am not thinking, still, someone else is, and 'always' applies by succession, so that God's irradiation may never cease to shine on us. For if we did not think always, but at times we did not think, it would cease. If this is how we say it always thinks, this belongs to human intellect. That it thinks always we apply not to one intellect in number but to all, just as we say that man lives always, not because of Socrates but because there is some man always living. WC

Reading

Averroes, *Commentarium Magnum in DA 3*, pp. 406-7, lines 575-83; 584-6 Crawford.

M. Geoffroy, C. Steel, eds, *Averroès, La béatitude de l'âme*, Paris 2001 (see pp. 210-11 in Averroès' letter).

R. McInerny, *Aquinas Against the Averroists*, Purdue University, West Lafayette, IA 1993.

P. Merlan, *Monopsychism, Mysticism, Metaconsciousness*, The Hague 1963.

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Richard Taylor, 'Improving on nature's exemplar: Averroes' completion of Aristotle's psychology of intellect', in Peter Adamson *et al.*, eds, *Philosophy, Science and Exegesis in Greek, Arabic and Latin Commentaries*, *BICS* suppl., 2004.

G. Verbeke, ed., *Thémistius Commentaire sur le traité de l'âme d'Aristote*, *CLCAG*, Leuven 1957, Introduction, ch. 2, 'Thémistius et le "De unitate intellectus" de Saint Thomas'.

G. Wald, *Self-Intellection and Identity in the Philosophy of Plotinus*, Peter Lang, Frankfurt am Main 1990, 159-167.

18. Problems about the Differentiation of Selves

18(a)(i) Introduction

In view of the identifications just discussed, Plotinus has a problem how souls, intellects, or selves can be differentiated, when they are discarnate and situated at the level of intelligibles or above.

The Platonic tradition did not always feel differentiation as a problem. Below under **18(a)(ii)** the true self is treated as reason or intellect. In none of these passages is there an effort to show that such a self would be distinctive in personality or distinct in other ways. There are Neoplatonist commentaries by Proclus (incomplete) and Olympiodorus, and papyrus fragments of a middle Platonist commentary, ed. F. Vendruscolo, *Zeitschrift für Papyrologie und Epigraphik*, 1993, on Plato's *First Alcibiades*, where at 133B-C Plato connects the true self with the intellect and the divine. But Plato there gives the commentators no occasion to dwell on the distinctness of the true self. On one interpretation, he actually contrasts the true self (*auto to auto*) with the individual self (*auto hekaston*) at *First Alcibiades* 130D3-5, translated under **18(a)(ii)**. But Nicholas Denyer in his commentary on the work interprets *auto to auto* differently as what it is for a thing to be itself.

Plotinus, however, is sensitive to the fear of losing one's own distinctness and addresses the issue. His sensitivity is apparent from his discussion of how souls just below the intelligible world could recognise each other as individuals, if housed in spherical vehicles, 4.4 [28] 5 (11-22), translated under **18(c)** below. It is also apparent from his reassuring us that in the intelligible world you will increase yourself (*seauton*) by letting go the rest, so that the whole world of intelligibles is present to you.

(1) Plotinus 6.5 [23] 12 (19-25)

You have become all and yet even before you were all. But because something else was added to you after the 'all', you became less by the addition. For the addition came not from Being (you will add nothing to that), but from non-Being. And when someone has come to be also from non-Being, he is not all, except when he rejects the non-Being. Thus you will increase yourself (*seauton*) by rejecting the rest, and when you reject it, being 'all' is present to you. RRKS

But how can it be that you would increase yourself by letting go the rest? Perhaps the clearest statement comes in 5.1 [10] 1 (1-17), which describes the opposite process by which souls voluntarily differentiate themselves from the divine Intellect. Plotinus thinks that the difference (*heterotês*) and willing to belong to oneself (*heautou einai*) and self-movement (*kineisthai par' hautôn*) is actually an act of pride (*tolma*), an apostasy or distancing (*apostasis*) of the soul from its divine

father, and a case of souls disregarding (*atiman*) themselves (*heautas*), through ignorance of their origin. For knowledge of one's father is central to knowledge of oneself.

(2) Plotinus 5.1 [10] 1 (1-17)

What is it, then, that has made souls forget their father, God, and be ignorant of themselves and him, even though they are apportioned (*moirai*) from there and wholly belong to him? The starting point of their evil was their audacity (*tolma*), their birth, the beginning of their differentiation (*heterotês*) and their willing (*boulesthai*) to belong to themselves (*heautôn einai*). When they made their appearance here revelling in this self-determination (*autexousion*) and enjoying this self-movement (*kineisthai par' hautôn*), going against the flow and having greatly distanced (*apostasis*) themselves, they lost sight of the fact that they came from that world. They are just like people snatched in childhood from their parents, who are unaware of themselves and their parents because of their lengthy upbringing away from them. So our souls no longer see either their father God or themselves (*heautas*); they disregard (*atiman*) themselves and regard everything else more highly than themselves through ignorance of their origin; they show admiration (*thaumazein*) and experience shock (*ekplagênai*), delight, addiction, so that they have divorced themselves as far as they are able, disregarding what they have abandoned (*apostrephesthai*). As a result their regard for all this and their disregard for themselves (*heautôn*) has become the cause of their utter ignorance of him [God]. BF, RRKS

Augustine is torn in two directions. On the one hand, he thinks the best prospect after death might be a life rapt in contemplation of God without memory or expectation, *Confessions* book 9, ch. 10, and books 12-13, and without genetic ties, *On the True Religion* 46.88-9; *Confessions* 9.13. On the other hand, almost in the same breath, he expresses the close tie with his mother, *Confessions* 9.10, and hopes a dead friend will remember him, *Confessions* 9.3.

The question whether the self is lost in mystical experience remained an issue. On Averroes and Eckhart, see Philip Merlan, *Monopsychism, Mysticism, Metaconsciousness*, 19-20; 100, on the disappearance of the *intellectus in habitu*.

It does not help with differentiation of persons that Plotinus probably accepts Platonic Forms of individuals, for these are shared at least by all the people or animals who are reincarnations of the same soul.

Differentiation is easy when we are embodied, or even when discarnate in the case of those whose souls do not rise as high as the intelligible world. Such souls are distinguished by the tenuous material 'vehicles' which enable them to display recognisable character, and by the retention of memories.

At the level of the intelligible world, Plotinus' favourite analogy for suggesting how there can still be differentiation is that of a theorem in a science which presupposes, but is distinct from, all the other theorems (**18(d)**).

It is first necessary to see what Plotinus considers to be the true self.

18(a)(ii) The true self

Greek has plenty of ways of expressing the idea of a self, such as various uses of pronouns. For example, *autos* without a noun sometimes demands to be translated 'self'. Plato insists that the soul is the self (Plato *Phaedo* 63B-C; 115C; *Republic* 469D6-9; cf. *Protagoras* 313A-B, and *First Alcibiades* 130A), the last dialogue much commented on by the Neoplatonists and accepted as genuine by them and, after a period of doubt, by many recent scholars. But that is only a beginning, for after the *Phaedo* Plato recognises extra parts of the soul which are non-rational, so the question is, which part is the true self? The most influential passage is in *Republic* book 9, where Plato speaks of the inner man (588B-589B). The three parts of the soul, reason, the drive for domination, and appetite for pleasure, are compared with an internal man, a lion, and a many headed beast, all three enclosed in a human body. This was standardly taken to imply that the true man is reason. Heckel has found its influence in St Paul, Philo and the Nag Hammadi Gnostics. It also influenced Plotinus and Porphyry in passages cited below. Other passages in Plato which encourage the idea that the true self is reason are *Alcibiades 1* 133B-C; *Republic* 439E6-440A3; 611B-612A; *Timaeus* 69C as well as the *Phaedo* passages which think of the soul as wholly rational. *First Alcibiades* 130D is the passage which, on one interpretation, divorces the search for a true self from questions of individuality.

Reading

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Nicholas Denyer, *Plato's First Alcibiades*, Cambridge 2001.

Christopher Gill, *The Structured Self in Hellenistic and Roman Thought*, forthcoming.

Theodor Heckel, *Der innere Mensch*, Tübingen 1993.

J.-F. Pradeau, introduction to *Plato, Alcibiade*, translation and notes by Chantal Arboeuf and J.-F.P. Raft, Paris 1999.

(3) Plato *First Alcibiades* 130D3-5

[We passed over] what was said just now in some such way as this, that we should have first to consider the thing itself (*auto to auto*). As it is, instead of the 'itself', we have considered what each individual (*auto hekaston*) is. RRKS

(4) Plato *First Alcibiades* 133C4-6

[Speaking of the place in the soul where its excellence, wisdom (*sophia*), comes to be, and around which there is knowing (*eidenai*) and understanding (*phronein*)] So this [part] of the soul looks like god, and whoever looks at this and recognises all that is divine, would recognise god and understanding (*phronêsis*) and thus also himself (*heauton*) most of all. RRKS

(5) Plato *Republic* 9, 589A6-B6

So one who says that justice pays would claim that we must do and say what results in the man within (*ho entos anthrôpos*) being the strongest [part] of the man, and in his taking care, like a farmer, of the many-headed creature, nurturing what is tame and domesticating it, preventing what is wild from growing, turning the lion's nature into an ally, and nurturing by caring for all the [parts] in common and making them friendly to each other and to himself. RRKS

Aristotle repeats from Plato the idea that the self is, or is 'especially', reason or intellect. But even in the *Protrepticus*, written early within Plato's Academy, he only feels able to say of this identification, 'I think one [or someone] might posit this'. Later in the *Ethics* he reports it as something that is thought (*dokein*). It becomes clear that 'especially' involves a heavy qualification for Aristotle. Whereas the Socrates of Plato's *Phaedo* 115B-C would after death become pure reason in the Isles of the Blest (alluded to in Aristotle's *Protrepticus*), Aristotle rejects the idea of life after death, and insists in *EN* 10.8 that humans will always need food and health, and cannot, like gods, escape the need to practise the virtues of human interaction, e.g. 1178b33-5.

(6) Aristotle *Protrepticus* fr. 6 (part) Ross

Therefore the soul is better than the body, for it originates things more, and of soul the better part is what has reason and thought (*logos, dianoia*). ... For I think one might (*oimai, theiê tis*) posit that we are this part either exclusively or especially. RRKS

(7) Aristotle *EN* 9.4, 1166a16-17

For [the good man so wishes and acts] for the sake of the intellectual (*dianoêtikos*) [part of the soul], which each person is thought (*dokei*) to be. ARL

(8) Aristotle *EN* 9.8, 1168b34-9a3

And one is called strong-willed (*enkratês*) or weak-willed (*akratês*) according as intellect (*nous*) does or does not rule, which suggests that each person is this, and [people] are thought to have done themselves and voluntarily (*hekousios*) those things especially [that they do] in accordance with a rational principle (*meta logou*). Now it is not unclear that each person is, or is especially (*malista*) this, and that the person of good sense (*epieikês*) especially cherishes this. ARL

(9) Aristotle *EN* 10.7, 1178a2-8

And each person might be thought (*doxeie an*) to be this, if [it is, or: he is] that which is authoritative (*kurios*) and better (*ameinon*); so it would be

absurd if one chose the life not of oneself but of something else. And what was said earlier fits in here too; for that which is appropriate (*oikeios*) to each thing is by nature most excellent (*kratistos*) and most pleasant for each, and for man in particular the life according to intellect (*nous*) [is this], if (*eiper*) man is especially this, so that this is also the happiest. ARL

Plotinus distinguishes reason as engaging in step by step ratiocination from intellect which has a static and timeless comprehension. Like Aristotle (Plotinus is not the first), he uses the term 'we' (*hêmeis*) as one of his ways of expressing the idea of self. Sometimes he speaks as if 'we' is either just the reasoning part, Plato's man within, or the whole soul, including the part concerned with the body. Sometimes he speaks of three men or three powers of soul. There is a power of the soul directed to the body, a reasoning power of soul and a highest power of soul directed to the intelligibles. We (perhaps the embodied self as a whole, rather than a fourth aspect) can direct the middle one upwards or downwards, 1.1 [53] 11 (1-8). And we are the one according to which we act, 6.7 [38] 6 (9-18). The true man or 'we' is the reasoning part, viewed either as the upper of two, or the middle of three.

'True man' and 'we' as the rational [element of] soul, viewed as the upper of two.

(10) Plotinus 1.1 [53] 7 (14-24)

From these forms, from which the soul alone now gets its control over the living creature, come discursive reasoning, opinion and intellection. It is then that we are most of all 'we'; beforehand there was only 'ours', but from here onwards there is 'we', attending from above the living creature.

Nothing prevents us from calling the whole a living creature, mixed in its lower phase, but above that effectively the true man. The lower part is an altogether 'lionlike' and 'multiform' beast [Plato *Rep.* 589A-B]. For if the man is at one with his rational soul, when we reason it is 'we' who are reasoning, because the reasonings of the soul are its activities. BF

(11) Plotinus 1.1 [53] 11 (1-8)

When we are children it is the influence of the compound which is active, and there is little illumination on us from things above. When this directs little of its activity towards us, it is because its energy is directed upwards. But it is directed on us when it reaches the middle.

Q: But is not the 'we' above the middle?

A: Yes, but there must be some apprehension of it. For we do not always use everything we possess, but only when we direct the middle upwards or downwards, or towards what we bring from potentiality or disposition to actuality. BF

'We' is ambiguous between just the rational [element of] soul (Plato's inner man) and that plus Plato's 'beast' element. Note that pity (*eleos*) is treated by Plato *Rep.* 606A-B, the Stoics and Plotinus as a defect. This was a major source of disagree-

ment with Christianity, and the rejection of pity in Epictetus' *Handbook* is the only thing corrected in one of the manuscripts taken over for monastic use.

Reading
For the evolution of Greek views on pity see:
David Konstan, *Pity Transformed*, London 2001

(12) Plotinus 1.1 [53] 10 (1-15)

Q: But if the soul is the 'we', and 'we' undergo these affections, then it would be the soul that is undergoing them, and also our actions will be its actions.

A: Well, we stated that the compound belonged to this 'we', especially before 'we' were separated from it; for we say that 'we' undergo whatever affections our bodies undergo. So the 'we' has two senses; sometimes we count in the bestial part, sometimes we mean what is now above it. A beast is an animated body, but the true man is something other, purified of all this bestiality, having intellective virtues which are rooted in the separated soul – separated and separable even when it is still in this world; for when this soul withdraws completely, then the lower phase which is illuminated by it departs in its wake. But the virtues which are not intellective but 'the product of habit and training [Plato *Rep.* 518E1-2]' belong to the compound; for so do the vices – ill-will, jealousy and pity.

Q: To what phase do friendships belong?

A: Some to the lower, some to the man within [Plato *Rep.* 589A-B]. BF

Three men in us:

(13) Plotinus 6.7 [38] 6 (9-18)

Man there in the intelligible world, being soul of this kind, is able to grasp them [i.e. bodies in the intelligible world]. From this source the lower man, his copy, contains the rational principles as copies. Man in Intellect contains the man who is before all men; he illuminates secondary man, and secondary man illuminates tertiary man; this lowest man in a way contains them all, although he does not become them but is merely put alongside them. One of us acts at this lowest level (*kata ton eskhaton*); the activity of the second contains something from the level above (*para tou pro autou*), and that of yet another something from the highest level (*para tou tritou*). Each (*hekastos*) is the one at whose level he is acting, although each contains yet does not contain all three. BF

Three powers (and elements) of soul:

(14) Plotinus 2.9 [33] 2 (4-12)

Some of our soul is always in the presence of these [three primary Beings], some is directed to this world and some is between. It is a single nature with many powers; sometimes it is carried along in its entirety by the noblest [element] of itself and of real Being, but sometimes the baser

[element] is pulled down and pulls the middle down with it – for it is not lawful for the soul to be pulled down in its entirety. It undergoes this affection because it fails to remain in what is most beautiful, which is where the soul which is not divided and of which we are not yet a part remains. BF

We direct the middle one in either direction:

(15) Plotinus 1.1 [53] 11 (5-8), translated as text (11) above

(16) Plotinus 2.9 [33] 2 (4-10), translated as text (14) above

We are the one in accordance with which we act. David Sedley has pointed to such a view adumbrated in Plato *Timaeus* 90B-C.

(17) Plato *Timaeus* 90B-C

Hence if someone has devoted all his interest and energy to his appetites or to competition (*philonikia*), all his beliefs must necessarily be mortal ones, and altogether, so far as it is possible to become *par excellence* mortal, he will not fall the least bit short of this, because it is the mortal part of himself that he has developed. But if someone has committed himself entirely to learning and to true wisdom, and it is these among the things at his disposal that he has most practised, he must necessarily have immortal and divine wisdom, provided that he gets a grasp on truth. And so far as it is possible for human nature to have a share in immortality, he will not in any degree lack this. And because he always takes care of that which is divine, and has the *daemon* that lives with him well ordered (*eu kekosmêmenon*) he will be supremely happy (*eudaimôna*). DNS

(18) Plotinus 6.7 [38] 6 (15-18), translated as text (13) above

(19) Plotinus 6.4 [22] 15 (35-8)

The man who has enslaved the rabble [within him] and has returned to his former [self] (*ekeinon*) lives the life of that [self] and is that [self], granting the body what he grants it as being something alien to himself (*heautou*). BF

'We' as the rational element, viewed as middle of three, and as controlling.

(20) Plotinus 5.3 [49] 3 (32-9)

Q: We have sensation by means of our senses, even if 'we' ourselves are not the ones having the sensation.

Is that then how we think? Is that how we reason by means of our intellect?

A: No: it is we ourselves (*autoi*) who are reasoning, and we ourselves who think the thoughts in our intellect – that is the 'we' (*hêmeis*); the activity of intellect is derived from above just as that of sensation is from below; we

are the controlling element (*kurion*) in the soul, midway between these two faculties, intellect the better and sensation the inferior. BF

Plotinus describes how one can live the life of higher and higher parts of oneself, always following the next highest *daemon* or guardian spirit above the level we have so far reached, because each soul is a universe containing many levels.

(21) Plotinus 3.4 [15] 3 (1-10; 18-22)

So who will be a daemon? He who was one here too. And who a god? One who was one here. For what was at work [then] leads him [reading *hekaston*], since it was leading him here too. Is this then the 'daemon which received him by lot while he lived [Plato *Phaedo* 107D6-7]'? No, it is a prior daemon, for it presides without being at work. It is what comes after it that is at work. And if what is at work is the faculty by which we have sense perception, the daemon is rationality. But if we live by rationality, our daemon is what is above this, presiding without being at work, but concurring with what is at work. So it is rightly said that 'we shall choose' [Plato *Rep.* 10, 617E1 on choosing our next incarnation], since by our life we choose what lies above that life.

If a man is able to follow the daemon which is above him, he comes to be above, living that daemon, and putting in command the better part of himself to which he is being led. And after that daemon, he lives another, until he is above. For the soul is many things and all things, both the things above and those below tending to the limits of all life, and each of us is an intelligible universe (*kosmos*). RRKS

Proclus objects that it is wrong to equate daemons with parts of the human soul – daemons are higher – and that it is wrong to allot more than one daemon to each person, as the person rises upwards from the life of appetite.

(22) Proclus *in Alc. 1*, 75,11-18; 76,6-10 Westerink

But neither do I think that people hit the truth of the matter, if they leave aside the rational soul and say that what is actually at work in the soul is the daemon, for example reason in beings that live according to reason, domineering (*thumikon*) in domineering people, nor even if they posit what lies immediately above [Plotinus 3.4 [15] 3 (9)] what is at work in our life, as reason is above domineering people and domineering above people who live by pleasure. For, first, to make daemons into parts of our souls shows too high an evaluation of human life. ...

Secondly, changes in life will introduce many kinds of exchange of daemon. For often the lover of money switches to the life of ambition (*philotimos*), and the ambitious person to the life of true opinion, and the latter to the life of understanding. So there will be a different daemon at different times, since the part that is at work is different at different times. RRKS

Sometimes Plotinus speaks as if the true self were something higher: our intellect, above our rational part. Thus, when the soul is in the intelligible world, you see yourself as intellect and hence immortal. Again, some of us were pure souls and intellect and we are the one that we were, despite the lower accretions. But there is a warning , 5.3 [49] 4 (7-13), that in seeing ourselves as intellect, we see ourselves not as man, but as other.

(23) Plotinus 4.7 [2] 10 (30-4)

You should remove this [impediment] and then contemplate; or rather the man who has removed it should view himself; he will then believe that he is immortal, when he sees himself residing in the intelligible and pure world. For he will see Intellect viewing nothing that is sensible or belongs to the mortal world, but thinking eternal thoughts by means of what is eternal. BF

(24) Plotinus 6.4 [22] 14 (16-31)

Q: And we – what are we? Are we the ancient and primordial, or that which approaches it, something that comes to be in time?

A: The answer is that before the birth of becoming we existed there, men of a different order – some of us even gods – pure souls, Intellect engaged with the totality of Being, inhabitants of the intelligible world, not isolated and cut off but parts of the whole. For not even in our present state are we cut off. But now, in his desire to exist, a different man has approached man there; and finding 'us' – for 'we' were never outside the All – he has wrapped himself round us, becoming an accretion of the man there that each of us was then. It is as if there were a single voice and a single expression to which each gave ear separately, so hearing and receiving and bringing to actuality a hearing which possessed what acted on it as something present to it. We have become the conjoint, not the one that we were before; and we are sometimes the other one, the later accretion added when our earlier phase became dormant and in a way not present. BF

(25) Plotinus 5.3 [49] 4 (7-13)

Thus the man who knows himself is twofold; part of him knows the nature of his discursive psychic thought (*dianoia*) and part is higher than this – the man who knows himself (*heauton*) as having become Intellect because of Intellect, by which he no longer knows himself as a man but as an entirely different being, hustling himself into the upper world and taking only the better part of his soul. BF

Another variant is that 'we' are the shade found in Hades after death, but the intellect is what makes us what we are (*kath' hên hêmeis*). Cf. Themistius *in DA* 100,16-22, translated under **18(a)(ii)**. The reference to Heracles comes from

Homer *Odyssey* 11.601-2, where Heracles' shade (*eidôlon*) turns out to be in Hades, while he himself (*autos*) is with the gods.

(26) Plotinus 4.3 [27] 27

But which soul [does memory belong to]? The one we call the diviner soul, which makes us what we are (*kath' hên hêmeis*), or the other soul that is derived from the whole?

Well, it must be stated that both have memories, individual in the one and shared in the other. When the two souls are united, all the memories are united; but when the souls are separated – provided they both survive – each remembers its own concerns longer and those of the other soul for a shorter time. At least the shade of Heracles in Hades – and in my opinion this is the shade that we should consider to be us (*hêmas*) – remembers all that was achieved during his life, since it was first and foremost his life. But the other souls, even when they became composite souls, still had no more to talk about than the events of life on earth (and they themselves knew these) unless perhaps [they could talk about] something pertaining to justice. But it was not stated [by Homer] what Heracles – the one without the shade – said. So what would the other soul, isolated and alone, say? For the soul that tows anything at all [of this world] along with it in its wake could recount anything that the man did or experienced; but as time progresses after his death, other memories from former lives will appear, so that the soul will disregard and reject some of its more recent memories. Becoming purer than body it will recall even things that it does not remember from this life. If it emerges into another body it will recount the events of its past life – the memories that it has just rejected – as well as many from former lives. But with the passage of time it will forget for ever many of the things that happened to it.

But when it is alone, what will it remember?

Well, we should first consider to which power of the soul memory belongs. BF

Even the One is like another self within:

(27) Plotinus 5.1 [10] 11 (7-10)

There must be the source of Intellect and its cause and God. It is not divisible. It stays, and stays not in place, but is seen in many beings, in each of those who can receive it like another self (*hoion allon auton*). RRKS

As for our lower soul, this is a mere image (*indalma*, 1.8 [51] 4 (30); 2.1 [40] 5 (7); 2.3 [52] 18 (12); 4.4 [28] 19 (3-4); 5.9 [5] 6 (19); 6.2 [43] 22 (33)), or trace (*ikhnos*, 2.3 [52] 9 (22)) of soul.

Reading

A.H. Armstrong, 'Elements in the thought of Plotinus at variance with classical intellectualism', *Journal of Hellenic Studies* 93, 1973, 13-22.
David M. Johnson, 'God as the true self: Plato *Alcibiades I*', *Ancient Philosophy* 19, 1999, 1-19.
Gerard O'Daly, *Plotinus' Philosophy of the Self*, Shannon 1973.
Jean Pépin, 'Héraclès et son reflet dans le néoplatonisme', *Le Néoplatonisme*, Colloque du CNRS, Royaumont, Paris 1971, 167-92.

Porphyry follows the view that we are intellect (*nous, noerai ousiai*):

(28) Porphyry *Abstinence* 1.29.4 (end)

And one's real self (*autos ontôs*) is the intellect, so the end is to live in accordance with the intellect. GC

(29) Porphyry *Abstinence* 1.30.6 (beginning)

For we were, and we still are, intellectual beings (*noerai ousiai*), pure from all perception and unreason. GC

(30) Porphyry *On Know Thyself ap.* Stobaeum 3,582,13-26 Hense, fr. 275F Smith

Knowing oneself [in Plato *Alc. 1*, 133C18-E3] seems to refer to the need to know soul and intellect, as that in which our essence consists (*hôs en toutôi hêmôn ousiômenôn*), whereas knowing oneself in every way seems to include us and what is ours and what belongs to ours. Such is the accuracy of Plato in these matters, who valued knowing oneself above all other things and separately from all our attributes, that is, knowing oneself in every way, so that the inner man (*ho entos anthrôpos* [Plato *Rep.* 9, 589A-B]) who is immortal may be known, and the outer man which is a copy may not be ignored, and what belongs to these may become known. For what belongs to the inner man is perfect intellect (*nous*), in which man himself consists and of which each of us is a copy. And what belongs to the outer image (*eidôlon*) is bodily things and possessions. RRKS

(31) Porphyry *On Know Thyself ap.* Stobaeum 3,580,6-11 Hense, fr. 274F Smith

But perhaps it is possible to understand him as saying 'be of sound mind' (*sôphronei*) in the sense of 'keep your mind (*phronêsis*) safe and sound (*sôizê*)'. For being of sound mind is a kind of safety of mind. That way, he would be talking with a view to using one's mind (*phronein*) and the cause of that, and giving the order to keep safe oneself, which would be one's intellect (*nous*). RRKS

Themistius ascribes to Aristotle the view that we are the productive intellect, but himself says that I am the combined potential and actual intellect, while my essence is the actual intellect (= productive 103,36-8).

(32) Themistius *in DA* 100,37-101,1

So we are the productive (*poiêtikos*) intellect. RBT

(33) Themistius *in DA* 100,16-20

We, then, are either the potential intellect or the actual (*energeiai*) [intellect]. So if, in the case of everything that is combined from what is potential and actual, this something (*to tode*) and what it is to be this something (*to tôide einai*) are distinct, then I (*to egô*) and what it is to be me (*to emoi einai*) will also be distinct, and while I am the intellect combined from the potential and the actual [intellects], what it is to be me comes from the actual [intellect]. RBT

(34) Themistius *in DA* 101,9-15

But for now we can more confidently affirm that he [Aristotle] believes that we are the productive (*poiêtikos*) intellect when he raises a problem, and solves it, by saying 'But we do not remember because this [productive intellect] is unaffected, while the passive intellect is perishable' [*On the Soul* 3.5]. For the problem implied here is also common to everyone who posits the intellect as immortal: 'Why after death do we not remember the content of our lives (*ta en biôi*), and exchange neither friendship nor hostility, nor appear to the family to whom we are most attached?' RBT

Reading

P. Hadot, *Plotin ou la simplicité du regard*, Paris 1989, ch. 2, trans. by Michael Chase as *Plotinus or the Simplicity of Vision*, Chicago 1993.
W. Himmerich, *Eudaimonia. Die Lehre des Plotin von der Selbstverwirklichung des Menschen*, Würzburg 1959.
Gerard O'Daly, *Plotinus' Philosophy of the Self*, Shannon 1973.
G. Wald, *Self-Intellection and Identity in the Philosophy of Plotinus*, Peter Lang, Frankfurt am Main 1990, 151-83.

Damascius rejects Plotinus' view of our different selves as forming a continuum, when he says that incarnation produces an actual change of substance in the soul. Damascius complains that to say otherwise would be to accept Plotinus' mistaken idea that part of our soul never descends, but continues contemplating the intelligibles without our normally being aware of it, *in Parm.* Ruelle vol. 2, 254,3-7. Damascius does, however, qualify his claim by saying that when the substance of soul is transformed, it is not lost, *in Parm.* Ruelle vol. 2, 272, 28-30. These and other passages of Damascius are translated in **Psychology 3(e)**; **13(d)**. The same insistence on the soul's substantial change is found in Damascius' colleagues, Priscian *Metaphrasis in Theophrastum* 31,24-32,25, and Simplicius *Comm. on Epictetus* ch. 27, line 273 Hadot, and it appears to derive from Iamblichus.

Reading
Carlos Steel, *The Changing Self*, Brussels 1978.

18(b) Do Platonic Forms of individual souls differentiate persons?

The best evidence for the view that Plotinus accepts Platonic Forms or Ideas (*ideai*) of individuals is 5.7 [18] 1 (1-7). But whether he does or not, I believe that this can provide no help with the differentiation of *persons*, since the individuals in question are *souls*. The implications for persons are rather devastating, for in the passage most widely accepted as postulating Forms of individuals, 5.7 [18] 1, Plotinus sees the difficulties in the theory of reincarnation. Corresponding to each individual soul, and to each Platonic Form of an individual soul, if there is one, there will be many different persons, Pythagoras and Socrates for example, and the other incarnations of the same soul. So an individual soul and its corresponding Form will be no more the soul or Form of Socrates than of Pythagoras, and of any animal into which it is incarnated, if human reincarnation as animal is allowed, as it is by Plotinus and Porphyry, though not by Iamblichus.

Plotinus' answer is that there are different rational forming principles (*logoi*) at work in each incarnation, and these *logoi* are closely related to the individual's form (*eidos*: he does not use the word (*idea*) most characteristic of Platonic Forms) at 5.9 [5] 12 (7); 5.7 [18] 2 (15); 5.7 [18] 3 (11). But a new problem now arises: since each soul contains all the *logoi* of all individuals, 5.7 [18] 2 (6); 5.7 [18] 1 (9-11), this might seem to obliterate all distinctions among souls and also among their forms, whether Platonic or not. Plotinus does indeed connect this last claim with the doctrine which also seemed to threaten distinctiveness, that the soul is all things, but he mitigates the point by saying that it acts in accordance with different things at different times, 6.7 [38] 6 (23). Moreover, in parents different *logoi* will be to hand (*prokheiroi*) at different times, 5.7 [18] 2 (6), and different ones may dominate (*kratein*) the embryonic matter, 5.7 [18] 2 (11). Even so, the soul of Socrates and the corresponding form or Form will have many different *logoi* active and to hand at different times in a cosmic time period, many of them not in the least characteristic of Socrates himself, and not activated by any action of Socrates.

There is another serious problem, because one of the passages discussed (5.7 [18] 2) envisages that the parents supply the *logoi* which form the children. Plotinus is alive to genetics and, incidentally, recognises that it is not the male alone or chiefly who provides the *logoi*, 5.7 [18] 2 (8-12); cf. Simplicius *in Phys.* 313,5-27. But the role for genetics is hard to square with the tradition of the myth of Er in Plato's *Republic* 10, 617D-620D, in which souls *choose* their next lives, including lives of animals, in order that God may not be responsible. This is the tradition which Plotinus favours especially when he is thinking of humans being reincarnated as animals, 3.4 [15] 2 (16-30); 4.3 [27] (6-10); 4.3 [27] 15 (10-11). Moreover, in two passages Plotinus describes how a soul may help to create the body for its next incarnation, 6.7 [38] 7 (8-16); 1.1 [53] 11 (8-15), and imaginatively compares the soul in the first passage to a dancer dancing a part. There is no mention of the genetic story of parental *logoi*, and the tradition of the soul's responsibility also seems incompatible with Plotinus' view that there is a body similar (*kath' homoiôsin*) to the soul awaiting its arrival to be incarnated, 4.3 [27] 12 (37-9).

Plotinus does seem convinced that in nature, whether or not among artefacts, no two specimens are completely alike, 5.7 [18] 3 (4-13). But we can now see that such distinctness of the individual person is not due to a Platonic Form alone, but,

insofar as Plotinus sometimes favours an account in terms of *logoi*, is due instead to the partly chance activation of some rather than others of the *logoi* which he mentions here. Such *logoi* might well produce the unique bundle of characteristics with which Porphyry identifies the individual in *Isagoge* 7,6-24, thereby leading later Neoplatonists wrongly to ascribe such a view to Aristotelians. See **6(b)** above.

I can now safely return to Platonic Forms of individuals, to express my agreement with Kalligas that 5.9 [5] 12 (3-10) does not repudiate Forms of individuals. I think it does not even mention Platonic Forms directly, but simply confirms the familiar story about distinctive *logoi*. I also agree with those who have pointed out that other texts do not deny Platonic Forms of individual souls, but only Ideas (*ideai*), e.g. of individual fire, 6.5 [23] 8 (39-42). On the other hand, Pauliina Remes has made a case for saying that Platonic Forms of individuals, though not excluded, are not postulated either.

Finally, Kalligas has pointed out that Plotinus asserts an identity between soul and essence or form (*eidos, to psukhêi einai, logos*). This raises the question whether the soul might be identical with the Platonic Form (*idea*) of the individual soul, although the terminology (*idea*) is not the same. Certainly, I do not think that the soul of Socrates can be identical with the Socrates-himself (*autosôkratês*) mentioned in 5.7 [18] 1 (4), since Socrates only borrows the soul formerly animating Pythagoras.

The individual soul and its Form corresponds to many reincarnated persons.

(1) Plotinus 5.7 [18] 1 (1-7)

Whether there is a Form (*idea*) of the individual too: if I and each individual has a means of ascent to the intelligible, the starting point of each of us is there too. If Socrates and the soul of Socrates exist always, there will be a Socrates himself (*autosôkratês*), insofar as the soul is individual and is, as one says, 'there'. But if [Socrates and his soul] do not exist always, but the former Socrates is born as different souls at different times, for example Pythagoras or someone else, this individual man is no longer there too. RRKS

Is the individuality of persons secured by rational forming principles (*logoi*)?

(2) Plotinus 5.9 [5] 12 (3-10)

But concerning man, we must consider whether the individual (*ho* [unaccented] *kath' hekasta* [transliteration standardised as two words instead of one]) also exists [there]. Individuality (*to kath' hekaston*) does exist there, because a given feature is not (*mê*) the same in different people. RRKS

For example, one man has a snub nose, another a hooked one; we should assume that snub- or hooked-nosedness are present in the form (*eidos*) of man, just as there are differences among animals. But the fact that one man has a snub or a hooked nose of a particular character is derived also from the matter. Some differences of complexion are to be ascribed to the rational forming principle (*logos*), others to the matter and variation of locality. BF

(3) Plotinus 5.7 [18] 1 (6-11)

But if [Socrates and his soul] do not exist always, but the former Socrates

is born as different souls at different times – for example Pythagoras or someone else – this individual man is no longer there too. But if the soul of each individual contains the rational forming principles (*logoi*) of all those men that it is born as, then all men exist in that world. We claim that each soul does contain all the rational forming principles that the universe contains. So if the universe contains the rational forming principles of individual creatures as well as of men, then so does the soul. BF

(4) Plotinus 6.7 [38] 6 (21-37)

When a soul takes on the body of an animal one wonders how it does so, if it has been the rational forming principle of a man. Well, the soul is all things, but is active according to something different at different times. While it is still pure and undefiled, it yearns for manhood and is man; for this state is nobler, and what is nobler is productive of what is nobler; it produces the higher spirits (*daemones*) which are of the same kind as the soul which produces man. The being that is higher than this soul is more spiritual (*daimoniôteros*), a god; a spirit is a copy of a god and depends on a god just as man does on spirit. The spirit that man depends on is not called a god, since it differs from god as souls differ from each other, although they are of the same order. We ought to follow Plato in calling these spirits. When a soul which has been attached to a man during the lifetime of the man chooses an animal nature and follows that path, then it displays the rational forming principle of the intelligible animal in it; for it contains this forming principle, and this actuality is inferior. BF

(5) Plotinus 5.7 [18] 2 (1-8)

But if it is the admixture of the rational forming principles of the male and female that gives the offspring their differing characteristics, then there will not be a particular forming principle of each child, and it will be one of the parents, for example the male, who produces the child not in accordance with differing rational forming principles but in accordance with one of his own or his father's.

The answer is that nothing prevents parents from producing children with differing characteristics, since they contain all the rational forming principles, of which some are to hand (*prokheiroi*) at any one time.

What about differences in children from the same parents?

Well, they are due to unequal predominance (*epikratêsis*). BF

These *logoi* are connected with the individual's form (*eidos*).

(6) Plotinus 5.9 [5] 12 (7), translated under **18(b)** above

(7) Plotinus 5.7 [18] 2 (14-16)

If the difference is repeatedly in respect of beauty, the form (*eidos*) is not one. The role of matter is to be assigned only to ugliness. RRKS

Cf. also the next passage (8), at 5.7 [18] 3 (11).

In nature every specimen is different, thanks to *logoi* and *eidos*, even if we cannot see the difference. Cf. the Stoics mentioned under **6(h)** above.

(8) Plotinus 5.7 [18] 3 (4-13)

If this is so [that there is only one rational forming principle in the case of indistinguishable (*aparallaktoi*) twins] then there will not be as many rational forming principles as there are individuals (*ta kath' hekasta*).

In fact there are as many different rational forming principles as there are individuals where the difference is not due to a failure in the form. Why shouldn't there be [different rational forming principles] even when the individuals are without difference (*adiaphora*), if in general some things are entirely without difference. For even if the craftsman is producing artefacts without difference, he must still make a mental distinction which will allow him to produce another one, applying difference (*diaphora*) to its sameness. In nature, where one thing comes into being after another not by calculation but only because of rational forming principles (*logoi*), the different characteristics must be linked to the form (*eidos*), even if we cannot perceive the differences. BF

Platonic Forms are explicitly rejected, not for souls, but e.g. for fire.

(9) Plotinus 6.5 [23] 8 (39-42)

It would be laughable to introduce many Ideas (*ideai*) of fire in order that each instance of fire should be shaped by one or another Idea. For in this way the Ideas will be infinite in number. BF

Soul is identical with its essence or form (*to psukhêi einai, eidos, logos*).

(10) Plotinus 1.1 [53] 2 (6-11)

If soul and its essence (*to psukhêi einai*) are the same, then the soul would be form (*eidos*) of a sort, not receptive of all those activities which it can pass on elsewhere; but it will have within itself, innate to itself, the activity which reason reveals. For in this way its immortality will be true immortality, since what is immortal must be indestructible and impassive, giving of itself in some way to what is outside itself. BF

(11) Plotinus 1.1 [53] 12 (7)

The description which attributes faultlessness to the soul posits a unity,

undifferentiated throughout, making soul and its essence (*to psukhêi einai*) the same. BF

(12) Plotinus 1.6 [1] 6 (13-18)

So the soul when purified becomes a form (*eidos*), a rational forming principle (*logos*), entirely bodiless and intelligible, belonging completely to the divine, which is the source of beauty and all its kin. So soul, when lifted up to the level of Intellect, is more and more beautiful. Intellect and its products are the soul's particular beauty, in no way alien to it, since then alone it is truly soul. BF

(13) Plotinus 3.6 [26] 18 (24-5)

Soul is itself a form (*eidos*) and contains the forms of real Beings; it contains them all together, and each form is all together with itself. BF

(14) Plotinus 4.4 [28] 16 (18-19)

What gives order is not matter and form together, but form (*eidos*) alone and power; this activity, second only to Intellect, is soul. BF

Most Platonists before Plotinus denied Platonic Forms of individual persons.

(15) Alcinous *Didaskalikos* 9.2, 163,23-8

Form is defined as an eternal model of things that are in accordance with nature. For most Platonists do not accept that there are forms of artificial objects, such as a shield or a lyre, nor of things that are contrary to nature, like fever or cholera, nor of individuals, like Socrates and Plato .... JD

Proclus denies Platonic Forms of individual persons.

(16) Proclus *PT* 1.21, 98,16-19 Saffrey-Westerink

And I am amazed at those Platonists who ascribe knowledge of all things to the intellect, even of individuals (*atoma*), I mean, and of things contrary to nature, and in general of evils, and who for that reason posit intellective paradigms of these things as well. RRKS

(17) Proclus *in Parm.* 824,12-825,9

Then shall we suppose there are not only Forms (*eidê*) of species but also Forms of particulars (*ta kath' hekasta*) – such as a Form of Socrates or any other individual (*hekastos*), not as members of the species man, but as manifesting, each of them, its distinctive property (*idiôs poion*)? Yet would

not this argument compel us to say that the mortal is deathless? For if everything that comes to be by virtue of an Idea (*idea*) comes to be from an unchangeable cause, and if everything that exists through an unchangeable cause is unchangeable in its being, Socrates and every other individual thing is the same at every moment of its being and established in eternity. But this is impossible.

[824,23] Furthermore, it is absurd that the Idea (*idea*) should be at one time a paradigm of something and at another time not, for what eternally is has eternally what it has; hence the paradigm either does not have the character of a paradigm or it has it always, for it is absurd to speak of accidental characters in the intelligible world. If, then, the Idea is to be a paradigm, there must be a copy (*eikôn*) of it, for every paradigm is the paradigm of a likeness. Now if the thing that conforms to it exists at some times and not at others, the paradigm will at times be a paradigm and at others not; it will exist for a period, and be non-existent through infinite time. But certainly to exist and not to exist in turn is absolutely alien to the being of that substance. Why should we not listen to Socrates when he says that our reason for positing the theory of Ideas (*ideai*) is that we may have a one prior to the many? But if there are Forms (*eidê*) of individuals, there will be a one before the one, nay rather, an infinity of things prior to the finite, for there will be an unlimited number of Forms, although things in the sense-world are limited. What could be more absurd than this? For things nearer to the One are more limited in number than those further away because number is more akin to the One. These considerations show that it is absurd to admit Forms (*eidê*) of individuals. GM, JD

Reading

A.H. Armstrong, 'Form, individual and person in Plotinus', *Dionysius* 1, 1977, 49-68, reprinted in his *Plotinian and Christian Studies*, London 1979.

H.J. Blumenthal, 'Did Plotinus believe in ideas of individuals?' *Phronesis* 11, 1966, 61-80.

H.J. Blumenthal, *Plotinus' Psychology*, The Hague 1971, ch. 9, 'Ideas of Individuals'.

F. Ferrari, 'Esistono forme di *kath' hekasta*? Il problema di individualità in Plotino e nella tradizione platonica antica', Accademia Sc. Torino, *Atti Sc. morali* 131, 1997, 23-63.

L. Gerson, *Plotinus*, London & New York 1994, 65-78.

Paul Kalligas, 'Forms of individuals in Plotinus: a re-examination', *Phronesis* 42, 1997, 206-27.

P.S. Mamo, 'Forms of individuals in the Enneads', *Phronesis* 14, 1969, 77-96.

D. O'Meara, 'Forms of individuals in Plotinus: a preface to the question', in J. Cleary, ed., *Traditions of Platonism*, Aldershot 1999, 263-9.

Paulina Remes, *Plotinus' Philosophy of the Self. Unity, Reason and Awareness*, PhD diss., University of London 2001.

John Rist, 'Forms of individuals in Plotinus', *Classical Quarterly* 13, 1963, 223-31.

John Rist, 'Ideas of individuals in Plotinus: a reply to Dr. Blumenthal', *Revue Internationale de Philosophie* 24, 1970, 29-30.

18(c) What differentiates souls, or intellects, or selves?

(i) In the body

In the body, differentiation is easy, and the relevant passages can be listed without translation. Souls are distinguished partly, but not entirely, by being divided up among bodies, Plotinus 6.4 [22] 4 (27); 4.3 [27] 8 (7-8). This does not make soul entirely divisible, since within a single body, the soul is present as a whole in every part (4.9 [8] 1 (1-7)). But further, there can be different experiences at the same time, just as one of my hands does not perceive what is happening to the other, even though there is one soul (4.9 [8] 1 (15)-4.9.2 (10); 4.9.2 (29-34)). One person can be in a state of union, another exercising discursive knowledge, a third in a state of desire and so on (4.3 [27] 8 (11-18)). One soul may be active and another inactive at the same time, 6.7 [38] 6 (23). This does not tell us how to differentiate souls which are at the same time in a state of union with higher beings.

As well as simultaneous differences of experience, there are differences of function and character (4.9 [8] 1 (15-23); 4.9 [8] 2 (22-9)). Character can be affected by the kind of body the soul has entered, by the blend (*krasis*, 4.3 [27] 7 (23-6); 4.4 [28] 31 (42)) of hot, cold, fluid and dry in it, by the climate (airs, waters, places), nurture and fortune (4.3 [27] 15 (7-11)). Matter can impede the development of a soul (1.8 [51] 14 (40-50)).

On one account, we have seen, differences in children are due to the different rational forming principles (*logoi*) which are ready and dominant in the soul of the parents (5.7 [18] 2). It is also said that differences in beauty, shape of nose, or colour can be due to form (5.7 [18] 2 (15); 5.9 [5] 12 (7); 5.7 [18] 3 (11)), evidently again thanks to the *logoi*.

(ii) When discarnate, but below the intelligible world, our souls can still be differentiated

This is partly because they retain tenuous physical vehicles by which distinctive characteristics can be displayed. We shall see Plotinus explaining, 4.4 [28] 5 (11-22) that vehicles, even if spherical, could display recognisable character and behaviour, although, as Stephen White has commented to me, the loss of emotions would blunt character traits. But conversation might be possible. Plotinus adds 4.3 [27] 18 (13-22) that vehicles are so much purer than earthly bodies that they do not conceal thoughts, but souls can understand each other, as even on earth, one can understand by the look in someone's eyes. Proclus agrees at *in Remp.* 2.166,16-21, that souls can hear, see and converse through vehicles, but adds *in Remp.* 2.165,16-19 that they might also know each other incorporeally.

Plotinus' idea that souls who have visited the timeless intelligible world will, on return, have forgotten more of their earthly life than other souls, because of the longer time spent without memories, must be referring to longer time as measured by the *other* souls, since their *own* experience was timeless.

(1) Plotinus 4.4 [28] 5 (11-31)

So according to this account, memory seems to have its beginnings in the heavens, when the [descending] soul has already abandoned the intelligible world. So when [the ascending soul] has left the sensible world and come to rest in the heavens it would not be surprising if, assuming that it

had memory of many of the things in this world as described, it also recognised many of the souls it knew; for they must clothe themselves in bodies of similar configuration. Even if they changed the shapes of their bodies to spheres, would they not recognise each other by their characters and the particular nature of their behaviour? This is not absurd. Although they may have put aside their accidental properties, there is nothing to prevent their characters from persisting. Also if they were able to converse (*dialegesthai*) they would recognise each other.

Q: [22] But what is the situation when they descend from the intelligible world?

A: The answer is that they arouse their memory of the same [earthly] things, but less powerfully than those other souls; they have other things to call to mind, and the longer time causes them to forget much completely.

Q: [26] But if they turn to the sensible world and here fall into the process of becoming, what will be the quality of their memories?

A: Well, they do not need to fall to the uttermost depths. For even if their movement has proceeded quite far, it is possible for it to halt; and nothing prevents them, before they reach the furthermost regions of becoming, from beginning to shed their garments again. BF

Another related source of distinctness is that below the intelligible world our souls can retain memories. Memory is not retained within the intelligible world itself, if that world is timeless (Plotinus 4.4 [28] 1 (1-14); cf. 4.4.2 (1-3); 4.4.5 (11-13; 22-3, only the last translated immediately above)). But below that world, souls can have memories of life (4.4 [28] 5 (12-31), as above; 4.4 [28] 3 (1-7); 4.3 [27] 32 (1-27)), which is indeed, (Plotinus 4.4 [28] 5 (11-22); Proclus *in Remp.* 2.165,22-6) essential for recognising each other. The reference to Heracles comes again from Homer *Odyssey* 11.601-2, where Heracles' shade (*eidôlon*) turns out to be in Hades, while he himself (*autos*) is with the gods. Plotinus, rather implausibly, represents Heracles (who was also a hero of the Cynics and Stoics) as an intellectual in his latter guise.

(2) Plotinus 4.4 [28] 3 (1-6)

When the soul leaves the upper world, unable to tolerate this unity, it falls in love with itself, and seeking a new identity it leans forward, so to speak; it is at this point that it apparently begins to remember. One part of its memory, which is of the upper world, still prevents it from falling; its memories of the lower world carry it downwards, while its memories of the heaven keep it there. In general it is and becomes what it remembers. BF

(3) Plotinus 4.3 [27] 32 (1-27)

What about memories of our friends, our children and our spouses? What about those of our country and all the things that it would not be absurd for a decent citizen to remember? The answer is that one part of us remembers each of these things and is affected, while the decent citizen

has his memories of them without an affection. For the affection perhaps takes place initially in the former, and the more decent affections are felt in the virtuous soul in so far as it shares anything with the former. It is fitting for the inferior soul to aspire to the memory of the activities of the higher soul, particularly when it is itself decent; for some souls can become better even from the outset because of the guidance of the superior soul, which must in turn be ready to forget what it receives from the lower soul. For it could be the case that the superior soul is morally good, but that the other soul is by nature inferior and only kept under forcible control by the superior. The more urgently the soul rises, the more it will forget – unless of course its whole life on earth has been such that its memories are only of what is nobler. For on earth 'it is noble to detach oneself from human concerns [Plato *Phaedrus* 249D1]'; this must also be the case with its memories. So in this sense it would be right to call the good soul forgetful. Furthermore, it escapes from plurality, reducing it to a unity by rejecting the indeterminate. For it is in this way that it avoids plurality, and is unencumbered, in charge of itself. For even while it is still on earth, it rejects everything alien in its desire to be in the higher world. When it is in the heavens, it retains even more. Heracles might tell of his brave deeds while in the heavens; but when he is taken to a holier place and arrives in the intelligible world, he will consider them insignificant, triumphing over the other Heracles in the contests in which the wise compete. BF

Souls acquire bodies, of increasing degrees of earthiness, only when they descend again.

(4) Plotinus 4.3 [27] 15 (1-7)

When souls have stolen a glance out of the intelligible world they proceed into the heavens; there they assume a body which they use to arrive at their more earthly bodies, in so far as they can be given size and extension. Some come straight from the heavens to lowly bodies, while others, whose powers are not sufficient to raise them from this world because they are pulled far downwards by their weight and their forgetfulness, are transferred from one body to another. BF

(iii) But how can there still be differentiation of souls in the intelligible world?

Plotinus, followed by Porphyry, sometimes relies on the idea of mere difference (*heterotés*). It is Difference and Sameness of which Plato says the World Soul is composed, *Timaeus* 35A1-6. In fact, he says it is true in general of incorporeal things that what distinguishes them is difference, 6.9 [9] 8 (29-32). To a Platonist, Difference, being one of the Five Great Kinds of Plato's *Sophist*, might seem to provide a fundamental kind of explanation, all the more since intelligibles are granted causal efficacy by Plotinus. But a modern philosopher will complain that the appeal to Difference does not show us how there can in the intelligible world be

a difference among souls, or among intellects, or among immaterial entities in general, as Plotinus supposes it does, followed by Porphyry.

(5) Plotinus 6.9 [9] 8 (29-32)

Bodies are prevented by other bodies from merging with each other, but nothing keeps bodiless entities apart. So they are not made distinct from each other by location, but by difference (*heterotês*) and distinctness (*diaphora*). BF

(6) Plotinus 6.4 [22] 4 (24-7)

All Being is together, even if it is a plurality in this way; for 'Being approaches Being' and 'all is together'; so Intellect is a plurality, with distinctions of difference (*heterotês*) and not of location; all Intellect is together. BF

(7) Plotinus 4.3 [27] 5 (6-9)

The answer is that none of the real Beings perish; for in that world Intellects do not perish into a unity, because they are not divided as bodies are, but each remains in a state of difference (*heterotês*), possessing sameness of being. BF

(8) Porphyry *Sentences* 37, 43,16 Lamberz

For what may be termed division in [the soul's] case is really just difference (*heterotês*). JD

It is not possible to distinguish souls in the intelligible world merely by what they could do, or may do when not there. For when it is said that they will descend again and put on bodies (4.3 [27] 15 (1-7), as above) the talk of descending again presupposes, instead of explaining, their having remained distinct. Similarly, when Plotinus says that souls retain their distinctive rationality (*logikai*) in the intelligible, because they remain able (*dunantai*) to engage in discursive reasoning, when circumstances arise, the reference in 'they' presupposes their distinctness.

(9) Plotinus 4.3 [27] 18 (8)

If they lack calculation in that world, how could they be rational?

Because they are able, one could say, to enjoy a wealth of reasoning when the circumstances arise. BF

What might seem to help is that, although souls have no memory in the timeless world of the intelligible, they are said to remember that world when they leave it, 4.4 [28] 3 (1-6); 4.4 [28] 5 (22-6), both translated in **18(c)** above. Certainly, it would be argued that their present knowledge is best explained as memory, and that its selectivity is due to their individual interests. Nonetheless, it would not follow

straight off that the knowledge they retain was in the intelligible world presented to them as distinct individuals rather than as merged. A supplementary argument might be needed in terms of inference to the best explanation: their distinctively different memories of the intelligible world are most economically explained, if it was they as distinct individual souls who had the knowledge in the intelligible world. But even this would not be enough, because their different memories might be due to differences in recall, not to differences in what they first saw.

Proclus does actually say that immaterial things can remain distinct and 'unfused' when united, and have distinct effects. But I don't think he offers the distinct effects as grounding the distinctness of the things.

Proclus refers in the following texts to the two components of the World Soul, Sameness and Difference, rotating in opposite directions.

(10) Proclus *in Tim.* 1.431,1-9 Diehl

It is a unique feature of incorporeal and immaterial things that their difference is made apparent by the activities which proceed out from them and their effects (*apotelesmata*). For if someone contemplated them in themselves, he would find them all within each other because of what might be called their uniform colour, especially so if he wanted to consider their henads. But from their secondary dependents and the things that participate in them we work out their natures which are unfused (*asunkhutos*). For where would the secondaries get their difference except by the unmixed purity of the causes? If the causes were merged with each other, they would give being to merged products. RRKS

(11) Proclus *in Tim.* 2.253,23-6; 254,17-19 Diehl

But some raise the following objection against this: given that the soul is homogeneous, how are the circle of the Same and that of the Different and the inner circle and the outer circle [Plato *Tim.* 36B-D] detectable?

It is impossible for things that fuse into each other (*sunkekhumena*) to express their own activities in a pure form. RRKS

The contrast here is with things that unite without fusion (*asunkhutos*, lines 6; 14; 28), a concept ascribed to Ammonius Saccas and brought to the fore by Porphyry, as described in **Psychology 6(b)**.

18(d) The analogy of a theorem

In *Ennead* 4 for souls and in *Ennead* 6 for intellects Plotinus uses the analogy of a theorem which is distinct from and yet presupposes all the other theorems of a science. This is his best explanation of differentiation in the intelligible world, though it is only an analogy.

As a theorem is part of a mathematical system, so our souls might be parts of the hypostasis Soul, but this would not be an ordinary sense of 'part', 4.3 [27] 2 (49-56). One way in which it is not ordinary emerges from the fact that our souls are derived from (*apo, ek*) the hypostasis Soul, as is said in the same *Ennead*, e.g.

4.3.5 (15-17); 4.3.8 (2). But a theorem is *derived* from the larger system as well as being part of it.

The analogy should presumably not be taken literally, if theorems and sciences are propositions, whereas (5.5 [32] 1 (32-9), translated under **16**; 5.8 [31] 5 (21)-6 (12)) what is seen in the intelligible world is more like images (*agalmata*), rather than being propositions, premisses, or statements (*axiômata, protaseis, lekta*).

In what sense does a theorem presuppose all the other theorems of a science? (I am indebted here to a seminar discussion with Eyjolfur Emilsson, Michael Frede and Paul Kalligas.) To understand a theorem requires seeing how it derives from higher principles, analysing it (*analusis*, 4.9 [8] 5) into the higher principles from which it derives, and it is only a theorem as opposed to an isolated statement, insofar as it does so derive. The idea of analysis, which Plotinus mentions, presupposes (see **9(e)** above) that you can unpack out of a theorem the higher principles from which it follows. What, however, about the theorem's sisters, nieces and offspring: parts of the science from which it does not derive? It might be thought that to understand it fully, you must see its place in the whole science. To see what one species of animal is, for example, you must see how it differs from species of the same and other genera and from subspecies of itself and of others.

Plotinus suggests that the particular theorem can be given prominence (*protetaktai*, 4.9.5), while the other parts escape attention (*lanthanein*). Souls and intellects retain individuality in the same way as a theorem which can be given prominence over the other propositions which it presupposes. The analogy is with the theorem, not with the mind that bestows prominence on it.

(1) Plotinus 4.3 [27] 2 (49-58)

Is it not then a part in the way that a scientific theorem is said to be a part of a particular science? The science is in no way diminished, and each division is a sort of expression (*prophora*) and actualisation (*energeia*). In such a case each part potentially contains the whole science, which is thereby none the less a whole. To apply this analogy to the soul as whole and parts: the whole whose parts are of this kind would not be the soul of something, but soul pure and simple; so it would not be the soul of the universe, but that too will be one of the partial souls. Therefore all souls are parts of a single soul and are uniform. BF

(2) Plotinus 4.9 [8] 5 (7-26)

Knowledge is a whole, and its parts are such that the whole persists and the parts are derived from it. The seed too is a whole and the parts into which it naturally divides are derived from it; each part is a whole, and the whole persists as an undiminished whole which the matter divides – all the parts comprise a unity.

[12] But you might claim that in the case of knowledge the part is not a whole.

The answer is that in this case the part needed is being dealt with in actuality and is given prominence (*protetaktai*), but the other parts are in attendance, lurking (*lanthanein*) in potentiality; all are present in the one. Perhaps it is in this sense that 'whole' and 'part' are being used here. In the

former case all the parts are together in actuality, so to speak, so that each part that you wish to deal with is accessible; the accessibility is in the part but it is given its potency by its sort of closeness to the whole. But we should not think that it is separate from the other propositions; if it were it would no longer be to do with art or knowledge, but mere childish prattle. So if it is to do with knowlege, it will contain all the parts in potentiality. The scientist understands one part of his field and infers the rest by a sort of deduction. In his analysis (*analusis*) the geometrician demonstrates that the one proposition contains all the prior ones which he uses to conduct his analysis as well as the subsequent ones generated from it. BF

(3) Plotinus 6.2 [43] 20 (4-23)

Each [science] is the potentiality of all of its parts, although it is itself none of them. But each part is itself in actuality and all the other parts in potentiality. This is true of science in general. The specific sciences lie within the whole in potentiality; they take in what is specific, and are the whole science in potentiality, since the whole, and not just part of the whole, is predicated of them. Yet the science itself must remain pure within itself. In just this way Intellect as a whole – the Intellect which is prior to the individual actualised intellects – is spoken of in one sense, and the individual intellects – the intellects that are partial and are brought to completion by the totality of things – in another; the Intellect which lies above all things supplies the individual intellects; it is their potentiality and embraces them in its universality, while they in turn, being partial within themselves, embrace (*ekhein*) the universal Intellect, just as a particular science embraces Science in general. Furthermore the great Intellect exists *per se*, as do the partial intellects which exist within themselves; and the partial intellects are included (*emperiekhesthai*) within the whole, and the whole within the partial; the partial intellects exist on their own and in another, and universal Intellect exists on its own and in them; all intellects exist within that one, which exists on its own in potentiality and is 'all things together' in actuality and each thing separately in potentiality; the partial intellects are what they are in actuality, and are the whole in potentiality. BF

This would qualify the claim that a single act of intellection by the soul sees all its objects, as a single act of seeing sees all the parts of a face. For some parts of the face will presumably be seen more sharply than others.

(4) Plotinus 4.4 [28] 1 (20-5)

Why should this apprehension not be a single act embracing all [the intelligibles] collectively? Would that not be an apprehension of things together?

No, for all thoughts are of a plurality-in-unity. The object of vision is

varied, and our thought of it is simultaneously varied and manifold – that is to say there are many thoughts just as there are many perceptions of a face – the eyes, nose and other features are all seen simultaneously. BF

Reading

A.H. Armstrong, 'Form, individual and person in Plotinus', *Dionysius* 1, 1977, reprinted in his *Plotinian and Christian Studies*, London 1979.

Gabriela Carone, 'Mysticism and individuality: a Plotinian paradox', in John Cleary, ed., *The Perennial Tradition of Neoplatonism*, Leuven 1997, 177-87.

Paul Kalligas, 'Forms of individuals in Plotinus: a re-examination', *Phronesis* 42, 1996, 206-27.

Arthur Madigan, 'Plotinus on personal individuality: the early period', in William J. Carroll, J.J. Furlong, C.S. Mann, eds, *The Quest for the Individual, Roots of Western Civilisation*, New York 1990, 89-103.

Gerard O'Daly, *Plotinus' Philosophy of the Self*, Shannon 1973.

Richard Sorabji, 'Is the true self an individual in the Platonist tradition?', in M.O. Goulet-Cazé, ed., *Le Commentaire entre tradition et innovation*, CNRS, Paris 2000.

For a more general account of individuation, not in the context of self, see under **6(a)-(e)** above.

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Richard Sorabji, ed., *Philoponus and the Rejection of Aristotelian Science*, 1987

2. Published translations

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'Simplicius': On Aristotle On the Soul 3.1-5, tr. H.J. Blumenthal
Themistius: On Aristotle Physics 4, tr. R.B. Todd
Themistius: On Aristotle On the Soul, tr. R.B. Todd

Translators in the Sourcebook

The translators are identified by their initials at the end of each translated extract.

ALP	A.L. Peck
AM	Arthur Madigan
ARL	Alan Lacey
AS	Andrew Smith
ASh	Anne Sheppard
AT	Alan Towey
B,B,F,I	Jonathan Barnes, Susanne Bobzien, Kevin Flannery, Katerina Ierodiakonou
BD	Brian Duvick
BF	Barrie Fleet
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DJF	David Furley
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FDH	Frans de Haas
FHS&G	W. Fortenbaugh, P. Huby, R.W. Sharples, D. Gutas
FWZ	Fritz Zimmermann
GB	Gerrit Bos
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GMat	Gary Matthews
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SS	Steven Strange
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TE	Theo Ebert
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VH	Verity Harte
WC	William Charlton
WED	W.E. Dooley

Abbreviations and Sigla

Most commentaries are contained in the series *Commentaria in Aristotelem Graeca* (= *CAG*), ed. H. Diels, Berlin.

Abst. = *de Abstinentia*
Cael. = *de Caelo*
Cat. = *Categories*
Comm. Not. = *de communibus notitiis*
Cons. = *Consolation of Philosophy*
DA = *de Anima*
de An. et Res. = *de Anima et Resurrectione*
de Dec. Dub. = *de decem dubitationibus*
de Hom. Opif. = *de Hominis Opificio*
EN = *Nicomachean Ethics*
Enarr. in Psalmos = *Enarratio in Psalmos*
ET = *Elements of Theology*
GC = *de Generatione et Corruptione*
Gen. Lit. = *de Genesi ad Litteram*
HA = *On the History of Animals*
in Alc. 1 = *Commentary on Plato's First Alcibiades*
in An. Post. = *Commentary on Aristotle's Posterior Analytics*
in An. Pr. = *Commentary on Aristotle's Prior Analytics*
in Cael. = *Commentary on Aristotle's de Caelo*
in Cat. = *Commentary on Aristotle's Categories*
in Crat. = *Commentary on Plato's Cratylus*
in DA = *Commentary on Aristotle's de Anima*
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in GC = *Commentary on Aristotle's de Generatione et Corruptione*
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in Meteor. = *Commentary on Aristotle's Meteorologica*
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in Phaed. = *Commentary on Plato's Phaedo*
in Phaedr. = *Commentary on Plato's Phaedrus*
in Phileb. = *Commentary on Plato's Philebus*
in Phys. = *Commentary on Aristotle's Physics*
in Remp. = *Commentary on Plato's Republic*
in Sens. = *Commentary on Aristotle's de Sensu*
in Somn. Scip. = *in Somnium Scipionis*
in Tim. = *Commentary on Plato's Timaeus*
in Top. = *Commentary on Aristotle's Topics*
Isag. = (*Isagoge*) *Introduction*
Lib. Arb. = *de libero arbitrio*

Lives = *Lives of Eminent Philosophers*
Mant. = *Mantissa*
Math. = *Adversus Mathematicos*
Metaph. = *Metaphysics*
Mixt. = *de Mixtione*
Myst. = *de Mysteriis*
Opif. = *de opificio mundi*
PA = *On the Parts of Animals*
PH = *Hypotyposes Pyrrhonenses* (*Outlines of Pyrrhonism*)
PHP = Galen, *de Placitis Hippocratis et Platonis*, ed. P. de Lacy, *Corpus Medicorum Graecorum* V.4.1-2, Berlin 1978
Phys. = *Physics*
Polit. = *Statesman*
Princ. = *On First Principles*
Prov. = *de Providentia*
PT = *Platonic Theology*
QAM = *Quod animi mores*
Quaest. = *Quaestiones*
Rep. = *Republic*
Rhet. = *Rhetoric*
St. Rep. = *de Stoicorum Repugnantiis*
Strom. = *Stromateis*
Symp. = *Symposium*
Theaet. = *Theaetetus*
Tim. = *Timaeus*
Trin. = *On the Trinity*

ANRW = *Aufstieg und Niedergang der römischen Welt*
CCAA= *Corpus commentariorum Averrois in Aristotelem*
CCL = *Corpus Christianorium Series Latina*
CLCAG = *Corpus Latinum Commentariorum in Aristotelem Graecorum*
CMAG = *Catalogue des manuscrits alchimiques grecs*
CSEL = *Corpus Scriptorum Ecclesiasticorum Latinorum*
Dox. Gr. = H. Diels, *Doxographi Graeci*, Berlin 1879, Berlin and Leipzig 1929
FHS&G = William Fortenbaugh, Pamela Huby, Robert Sharples, Dimitri Gutas, *Theophrastus of Eresus: Sources*, Parts 1 and 2, Leiden 1992
GCS = *Die griechischen christlichen Schriftstellen*
LS = A.A. Long, D.N. Sedley, *The Hellenistic Philosophers*, vol. 1, Cambridge 1987
OSAP = *Oxford Studies in Ancient Philosophy*
OCT = Oxford Classical Text
PG = Migne, *Patrologia Graeca*
PL = Migne, *Patrologia Latina*
SVF = H. von Arnim, *Stoicorum Veterum Fragmenta*, Leipzig 1903-5

< > Angle brackets indicate an addition proposed to the original text.
[ ] Square brackets are used for explanatory additions to the translation which are not in the original.
Inverted commas around an author's name or a question mark after an author's name indicate some uncertainty about the attribution to that author.

Main Thinkers Represented in the Sourcebook

For biographical detail, see Richard Goulet, *Dictionnaire des philosophes antiques*, CNRS Paris (up to the letter J in 2000).

Abû Bishr Mattâ, Arabic translator *c.* 900 AD
Aidesius of Cappadocia, pupil of Iamblichus *c.* 280/290 – *c.* 355 AD
Albert the Great, teacher of Thomas Aquinas, 13th cent. AD
Alcinous, Middle Platonist, mid-2nd cent. AD
Alcmaeon, Presocratic philosopher, born around 500 BC?
Alexander of Aphrodisias, leading commentator in the Aristotelian school, fl. *c.* 205 AD
Amelius, student of Plotinus in 3rd cent. AD
Ammonius, son of Hermeias, pupil of Proclus and head of Alexandrian Neoplatonist School, *c.* 435/45-517/26 AD
Ammonius Saccas, teacher of Plotinus in 3rd cent AD
Andronicus of Rhodes, Aristotelian editor of Aristotle, 1st cent BC
Antipater of Tarsus, head of Stoic School *c.* 152 – *c.* 129 BC
Antoninus, pupil, like Plotinus, of Ammonius Saccas, 3rd cent. AD
Apollonius of Perga, astronomer, *c.* 200 BC
Apollonius of Tyana, neo-Pythagorean, 1st cent. AD
Apuleius, Middle Platonist, Latin author of *The Golden Ass*, born *c.* 123 AD
Archedemus of Tarsus, founder of Stoic school in Babylon, *c.* 145 BC
Archimedes, mathematician and inventor, *c.* 287-212/211 BC
Archytas, Pythagorean friend of Plato, first half of 4th cent. BC
[pseudo]-Archytas, neo-Pythagorean, author of a *Categories* purporting to pre-date Aristotle's, second half of 1st cent. AD
Aristarchus of Samos, pupil of Strato, propounded heliocentric hypothesis, observed summer solstice in 280 BC
Aristotle, 384-322 BC
Aristotheros, had controversy on astronomy with Autolycus, 4th cent. BC
Asclepius, Neoplatonist pupil of Ammonius, son of Hermeias, in 6th cent. AD
Aspasius, Aristotelian, 2nd cent. AD
Athenagoras, Alexandrian Church Father, late 2nd cent. AD, taught Clement
Athenodorus, probably the Stoic teacher of the Emperor Augustus, 1st cent. BC
Atticus, Middle Platonist, fl. *c.* 176-180 AD
Augustine, St, Bishop of Hippo, 354-430 AD
Autolycus of Pitane, astronomer, 4th cent. BC
Averroes, Islamic philosopher, *c.* 1126 – *c.* 1198 AD
Avicenna, Islamic philosopher, *c.* 980-1037 AD
Bacon, Roger, 1214/20-1292 AD
Basil of Caesarea, Cappadocian bishop, brother of Gregory of Nyssa, *c.* 330-379 AD
Boethius, Christian Neoplatonist, provided Neoplatonising commentaries in Latin on Aristotle's logic, author of *The Consolation of Philosophy*, *c.* 480 – *c.* 525 AD

Boethus of Sidon, Aristotelian pupil of Andronicus, 1st cent. BC
Bonaventure, St, *c.* 1217-1274 AD
Calcidius, Christian commentator in Latin on Plato's *Timaeus*, 4th-5th cent. AD
Callippus, astronomer associate of Aristotle, refined the theories of Eudoxus, 4th cent. BC
Chaldaean Oracles, text of *c.* 200 AD, first commented on by Porphyry
Chrysippus, leading Stoic, 3rd head of School between *c.* 232 and *c.* 206 BC
Claudianus Mamertus, Christian writer in Latin, influenced by Porphyry, died *c.* 474 AD
Cleanthes, 2nd head of Stoic School, died *c.* 232 BC
Clement of Alexandria, head of Christian School in Alexandria, 150-215 AD
Cleomedes, Stoic following Posidonius, between 0 and 150 AD
Cornutus, Stoic, 1st cent. AD
Damascius, last head of Athenian Neoplatonist school, closed 529 AD
David, Christian commentator on Aristotle's logic, late 6th cent. AD
Democritus, Presocratic philosopher, fl. *c.* 435 BC
Democritus Chnous, Platonist, 3rd cent. AD
Dexippus, Neoplatonist pupil of Iamblichus, 4th cent. AD
Diodorus Cronus, dialectician, died *c.* 284 BC
Diogenes of Babylon, head of Stoic School, died *c.* 152 BC
[pseudo]-Dionysius, passed off paraphrases of Proclus as early Christian mystical documents, around start of 6th cent. AD
Dousareios, Egyptian priest mentioned by Ammonius
Elias, Christian commentator on Aristotle's logic, late 6th cent. AD
Epictetus, Stoic, between *c.* 50 and *c.* 125 AD
Epicurus, founded his School in Athens *c.* 307 BC, died 271 BC
Epiphanius, *c.* 315-403, considered philosophy to be heresy, and excerpted Methodius' arguments against Origen.
Euclid, mathematician, author of the *Elements*, between 325 and 250 BC
Eudoxus, astronomer colleague of Plato, 4th cent. BC
Eudemus, pupil of Aristotle, late 4th cent. BC
Eusebius, Church historian, *c.* 263-339 AD
Eustratius, commentator on Aristotle, 1050/1060 – *c.*1120 AD
Evagrius, 4th cent. AD desert Father
Farabi, Islamic philosopher, *c.* 873-950 AD
Galen, doctor and eclectic philosopher, *c.* 129-199 AD
Ghazâlî, Islamic philosopher 1058-1105 AD
Gorgias, orator, sophist of 5th cent. AD, subject of Plato's *Gorgias*
Gregory of Nyssa, Cappadocian bishop, reader of Porphyry, brother of Basil of Caesarea, *c.* 335-394 AD
Grosseteste, Aristotelian scholar, early 13th cent AD
Heracleides of Pontus, Platonist, 4th cent. BC, turned to Aristotelian school
Heraclitus, Presocratic philosopher, wrote between 499 and 478 BC
Hermarchus, succeeded Epicurus, 271 BC
Hermeias, reproduced lectures on Plato *Phaedrus* by his teacher Syrianus in 5th cent. AD
Herminus, teacher of Alexander of Aphrodisias, 2nd cent. AD
Hermotimus, legendary shaman
Hero of Alexandria, pneumatologist, 1st cent. BC
Herophilus, discovered the nerves and ovaries, 3rd cent. BC
Hierocles, Alexandrian Neoplatonist, studied under Plutarch of Athens before 423 AD
Hierocles, Stoic ethicist, fl. *c.* 100 AD
Hipparchus, astronomer, 2nd cent. BC

Hippocrates of Cos, doctor, between 460 and 360 BC, around whose work there grew a corpus of 60 medical treatises.
Iamblichus of Apamea, rebellious pupil of Porphyry, reforming theological basis of Neoplatonism, *c.* 250 – before 325 AD
Jerome, translator of the Bible into Latin, correspondent of Augustine, *c.* 347-419/20 AD
Julian of Tralles, Aristotelian or Platonist of *c.* 100 AD, cited for astronomical opinions.
Julian, Emperor and follower of Iamblichus, tried and failed to restore paganism, 331-363 AD
Longinus, Neoplatonist fellow student of Plotinus, 3rd cent. AD
Lucius, Platonist critic of Aristotle's *Categories*, like Nicostratus
Lucretius, formulated Epicureanism in Latin verse, *c.* 94-55/51 BC
Macrobius, 5th-cent. populariser of Neoplatonism in Latin
Maimonides, Jewish philosopher, 1135-1204 AD
Manicheans, followers of Mani, heretics opposed by Augustine
Marcus Aurelius, Emperor, Stoic, 121-180 AD
Marinus, pupil and hagiographer of Proclus, late 5th cent. AD
Maximus of Ephesus, *c.* 320-372 AD, studied under Iamblichus' pupils
Methodius, bishop, opponent of Origen, perhaps start of 4th century AD
Metrodorus of Chios, Democritean atomist, 4th cent. BC
Michael of Ephesus, 12th cent. commentator on Aristotle
Mnesarchus, joint head of Stoic School from 110 BC
Moderatus of Gades (Cadiz), neo-Pythagorean, early 1st cent. AD
Nemesius, bishop and cultivated source for pagan philosophy, late 4th cent. AD
Nicostratus, Platonist, critic of Aristotle's *Categories*, 2nd cent. AD
Olympiodorus, last pagan head of Alexandrian Neoplatonist School, 495/505 – after 565 AD
Origen, Christian utilising pagan philosophy, successor to Clement in Alexandria, *c.* 185-253/4 AD
Parmenides, Presocratic philosopher, born *c.* 515 BC
Philo of Alexandria, Jewish philosopher, 1st cent. AD
Philo, dialectician, pupil of Diodorus Cronus, early 3rd cent. BC
Philoponus, Christian Neoplatonist pupil of Ammonius, using pagan arguments to supplant pagan science, *c.* 490-570s AD
Philopator, Stoic opposed by Alexander, 2nd cent. AD
Plato, *c.* 427-348 BC
Plotinus, founder of Neoplatonism, *c.* 205-260 AD
Plutarch of Chaironeia, Middle Platonist, *c.* 46-120 AD
Plutarch of Athens, teacher of Syrianus and Proclus, died by 432 AD
Polemarchus of Cyzicus, astronomer pupil of Eudoxus, 4th cent. BC
Porphyry, pupil, biographer, and editor of Plotinus, critic of pagan and Christian religion, stabiliser of the tradition of commentary on Aristotle, 232-309 AD
Posidonius, Stoic, *c.* 135-51 BC
Priscian of Lydia, member of Athenian Neoplatonist school at closure in 529 AD
Proclus, head of Athenian Neoplatonist school, *c.* 411-485 AD
Ptolemy, astronomer, fl. between 146 and *c.* 170 AD
Pythagoras, 2nd half of 6th cent. BC
Sallustius, Neoplatonist, associate of Emperor Julian, 4th cent. AD
Seneca, Stoic, tutor to the tyrant Nero, *b.* 4-1 BC; *d.* 65 AD
Severus, Platonist of 2nd cent. AD
Sextus Empiricus, Pyrrhonian sceptic, late 2nd cent. AD

Simplicius, left Athenian school at closure in 529 AD, and thereafter wrote the most comprehensive commentaries extant
Sopater, pupil of Iamblichus
Sosigenes, teacher of Alexander of Aphrodisias, 2nd cent. AD
Stephanus, lectured on Aristotle in Byzantium and Alexandria around 600 AD
Strato, 3rd head of Aristotelian School, died *c.* 269 BC
Synesius, Christian Neoplatonist, bishop, *c.* 370-413 AD
Syrianus, Neoplatonist pupil of Plutarch of Athens, teacher of Proclus and Hermeias, died *c.* 437 AD
Taurus, Middle Platonist, fl. *c.* 145 AD
Themistius, rhetorician and commentator, with Platonist tendencies, though not belonging to the Neoplatonist school, fl. late 340s-384/5 AD
Theodore of Asine, pupil of Iamblichus, 4th cent. AD
Theodore of Mopsuestia, Christian disparaged by Philoponus, 352-428 AD
Theophrastus, succeeded Aristotle in 322, died 287 BC
Thomas Aquinas, St, author of *Summa Theologiae*, *c.* 1225-1274 AD
Ibn Tufayl, Islamic philosopher, died 1185 AD.
William of Moerbeke, 13th cent. AD, translated commentaries into Latin for Thomas Aquinas
Xenarchus, Aristotelian, end of 1st cent. BC
Xenocrates, became 3rd head of Plato's School in 339, died 314 BC
Xuthus, Pythagorean mentioned by Aristotle
Zeno of Citium, founder of Stoicism, *c.* 300 BC
Zeno of Elea, Presocratic author of paradoxes of motion, *b. c.* 490/485 BC

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